

1	0401-001033	R2412_DIO	1	MCL4154	D303
2	0402-001329	sod_123	1	STPS140Z	D431
3	0402-001331	R3516_DIO	2	CRS04-TE85L	D402 D410
4	0406-001083	sop5_w210_P0.65	2	ESDA6V1W5	D406 D427
5	0406-001104	sot323-6L	2	ESDA6V1-5W6	D407 D408
6	0407-001002	EMD_3	3	DAN222TL	D302 D401 D403
7	0407-001007	Csop5_w210_P0.65	1	UMN1	D304
8	0501-000162	soL_323a	2	2SA1576FRT106	Q301 Q403
9	0501-000218	soL_323a	1	2SC4081BRT106	Q400
10	0501-000225	EMD_3	1	2SC4617	Q100
11	0501-002011	soL_23_R	2	2SD2114KT146V	Q300 Q302
12	0504-000167	EMD_3	1	DTC114EE/TR	U445
13	0504-000168	EM3_a	3	DTC144EE/TR	U409 U453 U621
14	0504-001012	EMD_3	2	DTC114YE	U209 U400
15	0504-001021	soL_23_hvm14s	1	DTB113ZK	U443
16	0504-001058	soL_363	5	RN4985	U204 U210 U211 U312 U412
17	0505-001332	Csop6_w190	1	FDG6301N	Q401
18	0505-001423	Csop6_w190	2	FDG6323L	Q102 Q402
19	0506-001004	Csop5_w210_P0.65	1	UMC5NTL	U309
20	0601-000276	R3216_LED	1	CL-150YG-CD-T	D300
21	0801-002540	sc-88	1	NC7SZ19P6X	U452
22	1001-001145	Csop6_w210_P0.65_A	2	MAX4599EXT-T	U413 U415
23	1003-001226	Csop8_w435_L053	1	D361A	U305
24	1009-001006	sc-74_v2	1	A3210ELH	U313
25	1103-001184	bga8_w305h387_L_v2	1	AT24C256-10UI-2.7-T.R	U304
26	1106-001301	bga72_w1100h800_R_v2	1	LRS1337	U448
27	1202-001022	Csop8_w340_L06	1	TC75W56FU-TE12L	U401
28	1203-001454	sot23-5M	4	LP2981AIM5X-3.0	U101 U102 U303 U442
29	1203-001511	soL_23_R	1	MAX809REUR-T	U307
30	1203-001515	Csop16_w520_L08_P0.63	1	LT1510-5CGN#TR	U441
31	1203-001701	sot23-5M	1	LP2982AIM5X-3.0	U613
32	1203-001702	Csop10_w435_L05	1	MAX1676EUB-T	U410
33	1205-001935	Cqfp56_w870h870_L045	1	HD155128TF	U454
34	1209-001337	sm_MLP28_w500h500-1	1	SI4133G-XM2R	U478
35	1404-001005	R2012_RES	1	NTH5G40B473J01TE, *	TH1
36	1405-001018	R1608_CAP	2	VC060314A300R, *	D305 D311
37	1405-001019	R1608_CAP	2	VC060305A150R, *	D306 D415
38	1405-001082	ALL1005_RES	10	VC040205X150R, *	D411 D413 D414 D419 D420 D421 D422 D423 D425 D426
39	1405-001093	ALL1005_RES	2	VC040214X300, 14K	D432 D433
40	2007-000138	ALL1005_RES	5	100,5%, 100	R200 R321 R528 R529 R530
41	2007-000139	ALL1005_RES	7	220,5%, 220	R203 R204 R300 R444 R447 R567 R568
42	2007-000140	ALL1005_RES	5	1K,5%, 1K	R106 R117 R306 R310 R419
43	2007-000141	ALL1005_RES	4	2.2K,5%, 2.2K	R103 R223 R433 R434
44	2007-000143	ALL1005_RES	2	4.7K,5%, 4.7K	R305 R327

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45	2007-000148	ALL1005_RES	29	10K,5%, 10K	R101 R112 R238 R240 R241 R303 R313 R315 R348 R420 R424 R427 R430 R435 R438 R450 R461 R526 R527 R535 R550 R551 R552 R554 R573 R604 R651 R661 R717
46	2007-000152	ALL1005_RES	1	20K,5%, 20K	R429
47	2007-000153	ALL1005_RES	1	22K,5%, 22K	R213
48	2007-000155	ALL1005_RES	1	27K,5%, 27K	R104
49	2007-000157	ALL1005_RES	3	47K,5%, 47K	R441 R442 R443
50	2007-000159	ALL1005_RES	1	56K,5%, 56K	R656
51	2007-000162	ALL1005_RES	13	100K,5%, 100K	R304 R309 R316 R402 R404 R422 R423 R432 R437 R533 R555 R564 R674
52	2007-000168	ALL1005_RES	1	470K,5%, 470K	R440
53	2007-000170	ALL1005_RES	3	1M,5%, 1M	R407 R408 R409
54	2007-000172	ALL1005_RES	3	10,5%, 10	R102 R220 R224
55	2007-000174	ALL1005_RES	1	47,5%, 47	R569
56	2007-000242	ALL1005_RES	1	1.5K,5%, 1.5K	R582
57	2007-000982	ALL1005_RES	1	5.6K,5%, 5.6K	R401
58	2007-001217	ALL1005_RES	2	82,5%, 82	R218 R628 R629
59	2007-001244	ALL1005_RES	1	91K,5%, 91K	R105
60	2007-001298	ALL1005_RES	1	51,5%, 51	R221
61	2007-001301	ALL1005_RES	6	68,5%, 68	R202 R210 R211 R679 R217 R680
62	2007-001305	ALL1005_RES	1	120,5%, 120	R625
63	2007-001306	ALL1005_RES	1	150,5%, 150	R681
64	2007-001307	ALL1005_RES	1	180,5%, 180	R107
65	2007-001308	ALL1005_RES	1	200,5%, 200	R426
66	2007-001311	ALL1005_RES	2	270,5%, 270	R652
67	2007-002796	ALL1005_RES	2	510,5%, 510	R445 R446
68	2007-007008	ALL1005_RES	1	300,5%, 300	R417
69	2007-007107	ALL1005_RES	1	100K,1%, 100K,1%	R308
70	2007-007135	ALL1005_RES	1	18K,1%, 18K,1%	R562
71	2007-007142	ALL1005_RES	2	10K,1%, 10K,1%	R617 R618
72	2007-007309	ALL1005_RES	1	12K,1%, 12K,1%	R563
73	2007-007311	ALL1005_RES	1	22K,1%, 22K,1%	R626
74	2007-007317	ALL1005_RES	4	2.2K,1%, 2.2K,1%	R452 R453 R454 R455
75	2007-007318	ALL1005_RES	4	1K,1%, 1K,1%	R456 R457 R458 R459
76	2007-007470	ALL1005_RES	1	7.5K,1%, 7.5K,1%	R418
77	2007-007480	ALL1005_RES	1	130K,1%, 130K,1%	R403
78	2007-007590	ALL1005_RES	1	82K,1%, 82K,1%	R307
79	2007-007592	ALL1005_RES	2	270K,1%, 270K,1%	R405 R561
80	2007-007771	ALL1005_RES	7	0,5%, 0	C138 R201 R319 R678 R683 R684 R718
81	2011-001344	R2010_RES_AR_1	2	EXB28V101JX, INSTPAR	R320 R324
82	2011-001345	R2010_RES_AR_1	1	EXB28V103JX, INSTPAR	R449

83	2203-000233	ALL1005_CAP	7	C101J,100PF,50V, 100PF	C144 C305 C452 C453 C454 C455 C658
84	2203-000254	ALL1005_CAP	20	C103K,10NF,16V, 10NF	C101 C102 C103 C123 C210 C307 C309 C313 C319 C326 C331 C335 C354 C434 C440 C449 C536 C569 C712 C719
85	2203-000278	ALL1005_CAP	5	C100D,10PF,50V, 10PF	C206 C235 C239 C262 C263
86	2203-000311	ALL1005_CAP	3	C121J,120PF,50V, 120PF	C215 C494 C657
87	2203-000330	ALL1005_CAP	2	C120J,12PF,50V, 12PF	C581 C618
88	2203-000359	ALL1005_CAP	1	C151J,150PF,50V, 150PF	C212
89	2203-000438	ALL1005_CAP	13	C102K,1NF,50V, 1NF	C211 C221 C227 C229 C230 C240 C261 C270 C556 C557 C562 C580 C664 C718
90	2203-000466	ALL1005_CAP	1	C010C,1PF,50V, 1PF	C724
91	2203-000585	ALL1005_CAP	1	C221K,220PF,50V, 220PF	C112
92	2203-000628	ALL1005_CAP	1	C220J,22PF,50V, 22PF	C237
93	2203-000654	ALL1005_CAP	2	C271K,270PF,50V, 270PF	C585 C655
94	2203-000679	ALL1005_CAP	21	C270J,27PF,50V, 27PF	C200 C232 C267 C269 C540 C555 C559 C560 C561 C563 C565 C568 C578 C579 C586 C615 C616 C617 C622 C665 C713
95	2203-000696	ALL1005_CAP	2	C020C,2PF,50V, 2PF	C716 C721
96	2203-000697	SR1608_CAP	1	C020C,2PF,50V, 2PF	C538
97	2203-000800	SR1608_CAP	2	C333K,33NF,25V, 33NF	C450 C451
98	2203-000812	ALL1005_CAP	20	C330J,33PF,50V, 33PF	C143 C204 C217 C234 C244 C264 C310 C311 C312 C327 C330 C437 C438 C439 C441 C442 C443 C448 C717 C722
99	2203-000995	ALL1005_CAP	5	C470J,47PF,50V, 47PF	C400 C401 C661 C698 C699
100	2203-001086	SR1608_CAP	1	C050C,5PF,50V, 5PF	C725
101	2203-001101	ALL1005_CAP	1	C682K,6.8NF,25V, 6.8NF	C315
102	2203-001178	ALL1005_CAP	1	C060D,6PF,50V, 6PF	C248
103	2203-001385	ALL1005_CAP	1	C1R5C,1.5PF,50V, 1.5PF	C714
104	2203-002443	ALL1005_CAP	1	C331K,330PF,50V, 330PF	C338
105	2203-002525	ALL1005_CAP	3	C561K,560PF,50V, 560PF	C126 C137 C481
106	2203-002668	ALL1005_CAP	1	C0R5C,0.5PF,50V, 0.5PF	C214
107	2203-002687	ALL1005_CAP	1	C122K,1.2NF,50V, 1.2NF	C589
108	2203-003054	ALL1005_CAP	4	C090C,9PF,50V, 9PF	C329 C444 C445 C539
109	2203-005052	ALL1005_CAP	1	C3R3C,3.3PF,50V, 3.3PF	C213

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110	2203-005061	ALL1005_CAP	24	C104Z,100NF,16V, 100NF	C106 C107 C110 C111 C114 C301 C308 C314 C316 C317 C332 C339 C407 C409 C416 C418 C419 C420 C421 C427 C534 C545 C701 C706
111	2203-005065	SR1608_CAP	16	C105Z,1UF,10V, 1UF	C108 C125 C323 C403 C411 C412 C413 C414 C415 C417 C422 C425 C431 C530 C537 C705
112	2203-005234	ALL1005_CAP	1	C1R2C,1.2PF,50V, 1.2PF	C575
113	2203-005444	ALL1005_CAP	1	C030B,3PF,50V, 3PF	C404
114	2203-005446	ALL1005_CAP	2	C2R7B,2.7PF,50V, 2.7PF	C224 C715
115	2203-005481	ALL1005_CAP	1	C473K,47NF,10V, 47NF	C459
116	2203-005503	ALL1005_CAP	2	C1801J,180PF,25V, 180PF	C456 C457
117	2203-005562	R3216_CAP_N	1	C106Z,10UF,10V, 10UF	C529
118	2301-001197	SR2012_CAP_N	1	390PF,16V, 390PF	C202
119	2301-001213	SR2012_CAP_N	1	6.8NF,16V, 6.8NF	C203
120	2404-000318	SR3518_TAN	1	6.8UF/16V, 6.8UF	C410
121	2404-001210	R7125_TAN	1	220UF/6.3V, 220UF	C249
122	2404-001101	R2012_TAN_N	1	1UF/16V, 1UF	C220
123	2404-001105	R2012_TAN_N	11	10UF/6.3V, 10UF	C105 C117 C124 C142 C306 C318 C324 C328 C406 C408 C535
124	2404-001134	R3828_TAN_v2	1	100UF/6.3V, 100UF	C436
125	2404-001162	tantal_test20_v2	1	950G476MAAJZTQ2, 47U	C446
126	2703-001180	ALL1005_IND	1	LL1005-F15NJ, 15nH	L203
127	2703-001190	SR1608_IND	1	LL1608-FH15NJ, 15nH	L100
128	2703-001747	ALL1005_IND	1	LL1005-F4N7K, 4.7nH	L619
129	2703-001284	SR1608_IND	1	HK1608-5N6S-T, 5.6nH	L403
130	2703-001293	SR1608_IND	1	HK1608-82NJ-T, 82nH	L200
127	2703-001514	SR1608_IND	1	0603CS-68NXJBC, 68nH	L201
128	2703-001545	SR1608_IND	2	0603CS-47NXJBC, 47nH	L212 L213
133	2703-001729	ALL1005_IND	1	LL1005-FH1N8S, 1.8nH	L594
134	2703-001730	ALL1005_IND	1	LL1005-FH15NJ, 15nH	L620
135	2703-001733	ALL1005_IND	1	LL1005-FH8N2J, 8.2nH	L211
136	2703-001737	ALL1005_IND	1	HK1005-2N7S-T, 2.7nH	L208
137	2703-001740	R6644_IND	1	BDS-4020R-100M, 10uH	L400
138	2703-001752	ALL1005_IND	1	LL1005-FH39NJ, 39nH	U614
139	2703-001786	ALL1005_IND	1	LL1005-FH10NJ, 10nH	L404
140	2703-001798	ALL1005_IND	1	2.0nH, 2nH	L402
141	2703-001950	ALL1005_IND	1	HK1005-12NK-T, 12nH	L596
142	2703-001951	ALL1005_IND	2	HK1005-33NJ-T, 33nH	L598 L599
143	2703-001952	ALL1005_IND	2	HK1005-8N2J-T, 8.2nH	L209 L597
144	2703-001970	ALL1005_IND	1	HK1005-18NJ-T, 18nH	L218
145	2703-002025	R4848_IND	1	BTC-0309-470M, 47uH	L401
146	2703-002052	IND_BDS_3516S	1	BDS-3516D-152M, 1.5mH	L300
147	2801-003856	sm_osc4_w620h085	1	C-146(32.768KHz, 20ppm)	X1
148	2809-001237	sm_osc4_w508h420_A	1	TCO-9131B(13MHz)	U100
149	2901-001116	sm_filt4_EMI-1	3	NFM39R12C471T1	E200 E201 E202
150	2904-001271	sm_filt6_f6ce_1	1	B4127	F206
151	3301-001208	R1608_MLF	2	BLM11P600SPT	FB400 FB401

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152	3709-001144	sm_con6_w1100h750	1	1318723-6, 1318723-6	J402
153	3710-001105	sm_con2_w438	1	24-8005-002-000-867	M400
154	3722-001380	sm_jack6_53BKA_v3	1	02-787B2-53BKA, Ear_jac	J400
155	4709-001214	DCS214E-2012	1	DCS214E-0897, INSTPAR	U622
156	911-rfopen1005	ALL1005_RES	13	NC, NC	R123 R436 R448 R572 R682 C104 C201 C242 C447 C596 C704 C707 C723
157	5.6K-1005	ALL1005_RES	1	5.6K,1%, 5.6K,1%	R624
158	B4148	sm_filt_6_w300h300	1	B4148	F205
159	B4155	sm_filt_6_w300h300	1	B4155	F204
160	B4846	sm_filt_8_w500h500a	1	B4846	F200
161	3002-001098	sm_buz2_w900	1	BRT-03S	BUZ300
162	DCS214E-1880	DCS214E-2012	1	DCS214E-1880, INSTPAR	U623
163	ENFVZ4L97	sm_osc12_w910h700_v2	1	ENFVZ4L97	U200
164	H942BH	sm_filt_6_w300h300_A	1	H942BH	F201
165	1209-001354	m_HD155173NP_w490h39	1	HD155173NP	U611
166	P2981AIM5X-2.	Csop5_w260	2	LP2981AIM5X-2.5	U306 U308
167	hrf-SHS-L090E	ANT SWITCH	1	HS-L090EP, SHS-L090E	U203
168	ONE_C1.2B	bga180_w1200h1200_L	1	VP40578	U414
169	3710-001633	AXK5F20345	1	2-175338-0, AXK5F20335	J403
170	IF CONNECTOR	IFCON	1	IFCON-26, VALUE	J401
171	pn-SEC_256K	TSSOP8PIN	1	EEPROM, SEC_256K	U624
172	rf-PF08120B-TB	PAM	1	PF08120B-TB	U476
173	4302-001119	BACKUP BATTER	1	RB414	BAT301

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1. Change of PIN1 or PIN2 / Unblocking of PIN1 or PIN2

To protect the SIM card from the improper use, a security feature is built in. Before they can use the mobile, users have to enter a four-digit personal identification number(PIN). The PIN is stored on the card. IF the wrong PIN is entered three times in a row, the card blocks itself, and may only be unblocked with an eight-digit personal unblocking key(PUK), which is also stored on the card.

Key in	F u n c t i o n
**04*OLD_PIN*NEW_PIN*NEW_PIN#	This procedure permits the user to change the PIN in the SIM
**042*OLD_PIN2*NEW_PIN2*NEW_PIN2#	This procedure permits the user to change of PIN2 in the SIM
**05*PIN_UNBLOCKING_KEY*NEW_PIN*NEW_PIN#	This procedure permits the user to unblock the PIN1
**052*PIN_UNBLOCKING_KEY2*NEW_PIN2*NEW_PIN#	This procedure permits the user to unblock the PIN2

2. Presentation of IMEI

The international mobile equipment identity(IMEI) is not only the serial number of a certain mobile station, but is also reveals the manufacturer, the country of production, and type approval.

LCD Display	Key in	F u n c t i o n
IMEI 44796789400044/8	*#06#	This procedure shall instruct the ME to display its IMEI

This procedure shall be accepted and performed with and without an inserted SIM.

3. Check a software version of mobile

LCD Display	Key in	F u n c t i o n
P001.01 GN10GUA6	*#9999#	This procedure permits the user to check software version

**BB TEST Program (WinTest.exe)**

We use WinTest program for checking RF part and Baseband part in detail.  
It's very easy to use because it forms by window.

**- How to use WinTest program**

1. Executing WinTest (Click WinTest Icon).
2. Click Download Icon.
3. Select Main File.
4. Click Start Icon.
5. Check download finish message .

**- Command of WinTest program**

1. H : Go to Main Menu Window.
2. . : Go to the previous menu.
3. Esc : Exit from program.

**- Menu of WinTest program**

## 1. RF part

- A(Automatic Frequency and Gain control) : AFC DAC value and AGC DAC value control.
- B(Burst Control) : Rx, Tx burst type setting.
- C(Channel Frequency) : Frequency change.
- D(Band Selection) : Change band(GSM, DCS).
- P(Power Ramping) : Power level change.
- R(Receive Signal Strength) : not frequently use.
- S(Synchronise) : not frequently use.
- T(Traffic Mode) : not frequently use.

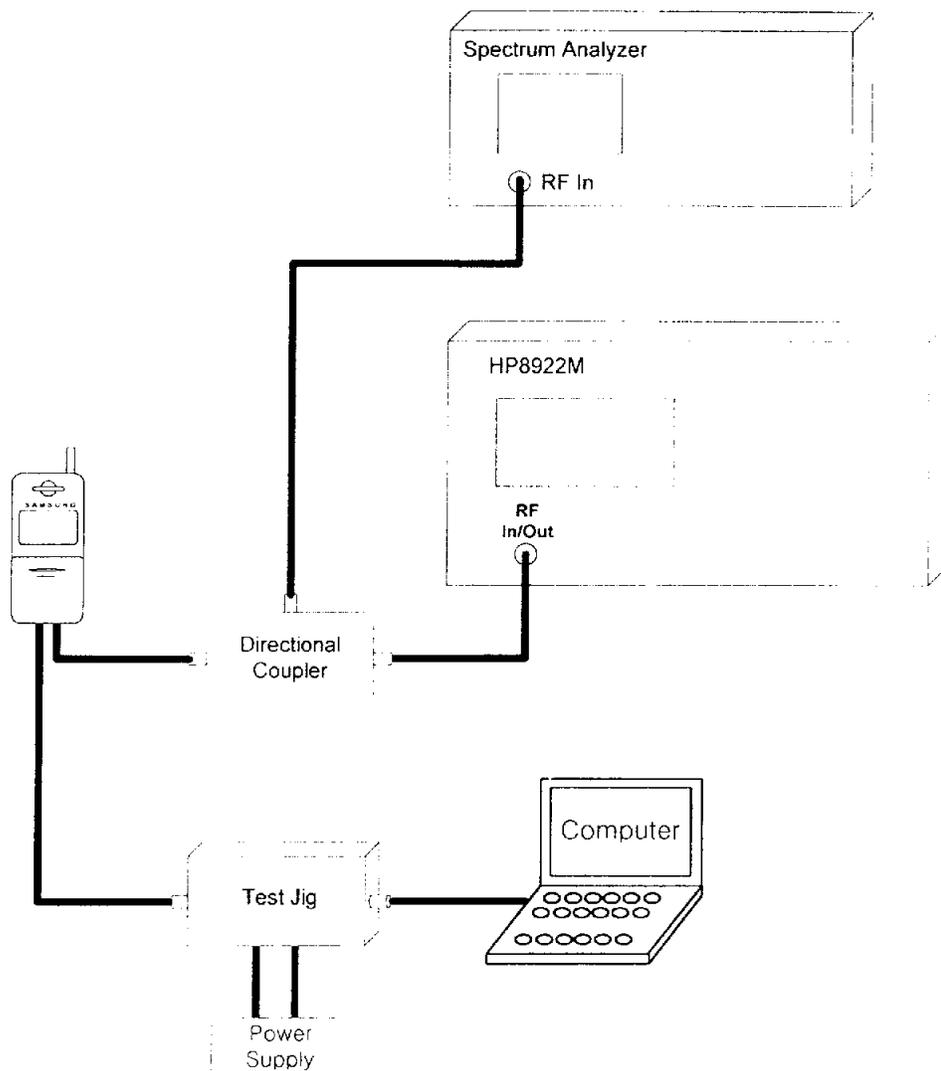
## 2. Logic part

- E(EEPROM Access(GPSI)) : Read and Write EEPROM.
- F(Flash Access) : Read and Write Flash Memory.
- G(GPIO & GPO) : Test GPIO & GPO of One-C.
- I(LCD Test) : LCD font and display test.
- K(Keypad Test) : Key test.
- M(Memory change)
- W(RTC Access) : Read and write RTC(Real Time Clock).
- V(Vocoder) : Buzzer and DTMF test.

### List of Equipment

- DC Power Supply
- Test Jig
- Test Cable
- GSM/DCS/PCS Mobile Station Test Set : HP8922M etc.
- Spectrum Analyzer(include GSM/DCS/PCS Test Mode) : HP8596E
- Computer

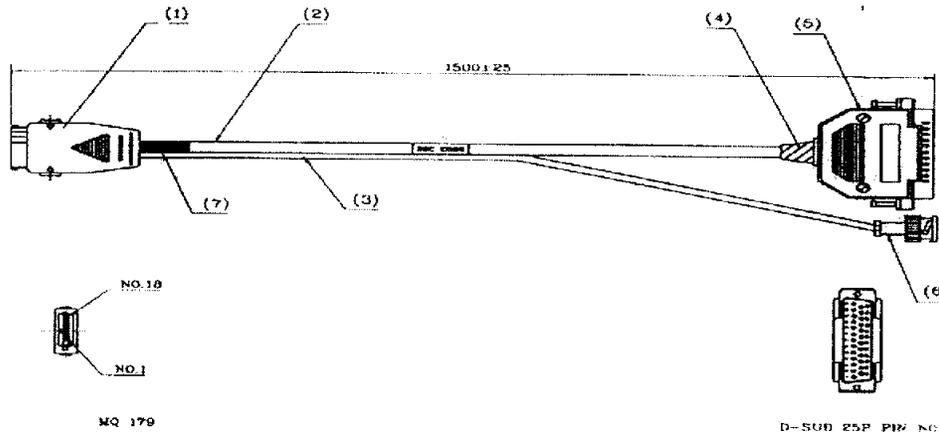
### Configuration of Test



※ 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 3.78V for normal test condition.  
(Nominal voltage of battery is 3.75V at cellular phone)

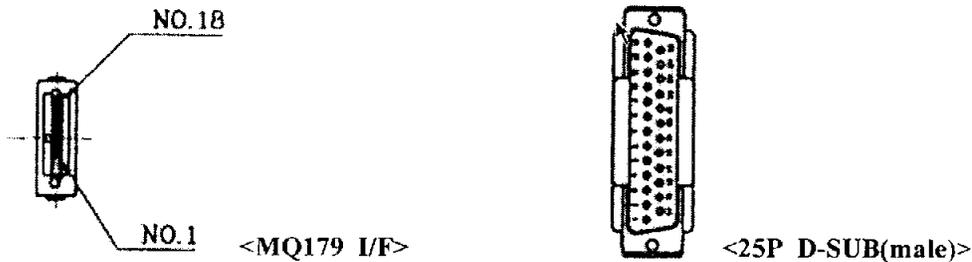
**Test Cable Description for SGH-N105**

**1. TEST CABLE**



1	Connector	5	D-Sub CON
2	Data Cable	6	BNC CON
3	RF Cable	7	TUBE
4	Bushing		

**2. D-Sub 25 PIN CONNECTOR Pin DESCRIPTION**



MQ179 I/F	25P D-SUB (MALE)	Description
2	1	Tx DATA
3	2	Rx DATA
4	3	RTS
5	4	SIMPWDN BOOT
6	5	GND 2 PAIRS
6	15	GND(FOR FEEDBACK) 2 PAIRS
7	6	GND
8	7	SKP2N
10	9	SCL
11	10	SDA
12	11	CTS
13	12	VCC 100
14, 15, 18	13, 14	DC VOLT, VBATT (3 PAIRS)
18	16	VBATT(FOR FEEDBACK) 2 PAIRS