2-1. GSM General Specification

lte	em	GSM850	EGSM 900	DCS1800	PCS1900
-	and[MHz] Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990
ARFC	N range	128~251	0~124 & 975~1023	512~885	512~810
Tx/Rx	spacing	45MHz	45MHz	95MHz	80MHz
	Bit rate/ Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us
	ot Period/ Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms
Modulation	GSM/ GPRS	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK
MSI	Power	33dBm ~5dBm	33dBm ~5dBm	30dBm ∼0dBm	30dBm ∼0dBm
Powe	r Class	5pcl ~ 19pcl	5pcl ~ 19pcl	0pcl ~ 15pcl	0pcl ~ 15pcl
Sens	sitivity	-102dBm	-102dBm	-102dBm	-102dBm
TDM	A Mux	8	8	8	8
Cell F	Radius	35Km	35Km	2Km	2Km

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2-2. GSM Tx Power Class

GSM850	TX Power control level	EGSM900	TX Power control level	DCS1800	TX Power control level	PCS1900	TX Power control level
33±2 dBm	5	33±2 dBm	5	30±3 dBm	0	30±3 dBm	0
31±2 dBm	6	31±2 dBm	6	28±3 dBm	1	28±3 dBm	1
29±2 dBm	7	29±2 dBm	7	26±3 dBm	2	26±3 dBm	2
27±2 dBm	8	27±2 dBm	8	24±3 dBm	3	24±3 dBm	3
25±2 dBm	9	25±2 dBm	9	22±3 dBm	4	22±3 dBm	4
23±2 dBm	10	23±2 dBm	10	20±3 dBm	5	20±3 dBm	5
21±2 dBm	11	21±2 dBm	11	18±3 dBm	6	18±3 dBm	6
19±2 dBm	12	19±2 dBm	12	16±3 dBm	7	16±3 dBm	7
17±2 dBm	13	17±2 dBm	13	14±3 dBm	8	14±3 dBm	8
15±2 dBm	14	15±2 dBm	14	12±4 dBm	9	12±4 dBm	9
13±2 dBm	15	13±2 dBm	15	10±4 dBm	10	10±4 dBm	10
11±3 dBm	16	11±3 dBm	16	8±4 dBm	11	8±4 dBm	11
9±3 dBm	17	9±3 dBm	17	6±4 dBm	12	6±4 dBm	12
7±3 dBm	18	7±3 dBm	18	4±4 dBm	13	4±4 dBm	13
5±3 dBm	19	5±3 dBm	19	2±5 dBm	14	2±5 dBm	14
				0±5 dBm	15	0±5 dBm	15

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2-3. WCDMA General Specification

	WCDMA2100	WCDMA1900	WCDMA850	WCDMA900
Freq. Band[MHz] Uplink/Downlink	1922~1977 2112~2167	1852~1907 1932~1987	824~849 869~894	880~915 925~960
ARFCN range	UL:9612~9888 DL:10562~10838	UL:9262~9538 DL:9662~9938	UL:4132~4233 DL:4357~4458	UL:2712~2863 DL:2937~3088
Tx/Rx spacing	190MHz	80MHz	45MHz	45MHz
Mod. Bit rate/ Bit Period	3.84 Mcps	3.84 Mcps	3.84 Mcps	3.84 Mcps
Time Slot Period /Frame Period	Frame Length: 10ms Slot length: 0.667ms	Frame Length: 10ms Slot length: 0.667ms	Frame Length: 10ms Slot length: 0.667ms	Frame Length: 10ms Slot length: 0.667ms
Modulation	QPSK/HQPSK	QPSK/HQPSK	QPSK/HQPSK	QPSK/HQPSK
MS Power	24dBm~-50dBm	24dBm~-50dBm	24dBm~-50dBm	24dBm~-50dBm
Power Class	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)	3(max+24dBm)
Sensitivity	-106.7dBm	-104.7dBm	-104.7dBm	-103.7dBm
TDMA Mux	8	8	8	8
Cell Radius	2Km	2Km	2Km	2Km

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2-4. LTE General Specification

	LTE Band1	LTE Band3	LTE Band5	LTE Band7	LTE Band8	LTE Band 20	LTE BAND 40
Freq. Band[MHz] Uplink/ Downlink	1920~1980 2110~2170	1710~1785 1805~1880	824~849 869~894	2500~2570 1805~1880	2500~2570 1805~1880	704~716 734~746	2300~2400
ARFCN range	UL: 18000~18599 DL: 0~599	UL: 19200~19950 DL: 1805~1880	UL: 20400~20649 DL: 2400~2649	UL: 20750~21449 DL: 2750~3449	UL: 21450~21799 DL: 3450~3799	UL: 24150~24449 DL: 6150~6449	38650~39649
Tx/Rx spacing	190MHz	95MHz	45MHz	120MHz	45MHz	41MHz	
Channel Bandwidth	60 MHz	75 MHz	25 MHz	70 MHz	35 MHz	30 MHz	5/10/15/20 MHz
Modulation	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK,16/64QAM	QPSK, 16/64QAM
MS Power (MPR)	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm	-35~25.7 dBm	- 35~25.7dBm
Sensitivit (QPSK) (BW 10MHz)	-94 dBm	-92 dBm	-92 dBm	-95dBm	-95dBm	-95dBm	-97dBm
Cell Radius	>5Km	>5Km	>5Km	>5Km	>5Km	>5Km	>5Km

3. Operation Instruction and Installation

Main Function

Item	Description
OS	Android 6.0.1
RF	2G GSM, 3G WCDMA, 4G LTE FDD,
Battery	3100mAh
Base Band	1.2GHz Quad core
Other RF	Bluetooth 4.1, WIFI 802.11 b/g/n 2.4GHz,USB2.0, GPS, Glonass ,NFC
Camera	13MP AF with LED Flash , 5MP Front camera with LED Flash
LCD	5.2" / 720*1280(Super AMOLED)
Memory	16GB eMMC,2Gb DDR
Sensor	Accelerometer, Proximity, Hall IC, Grip,
	Charger: 5V/1.55A, White
Accessory	Data Cable : 3.0PI, 0.8M, White
	Ear phone: 3.5PI, 4Pin

9. Reference Abbreviate

Reference Abbreviate

- AAC: Advanced Audio Coding.
- AVC : Advanced Video Coding.
- BER : Bit Error Rate
- BPSK: Binary Phase Shift Keying
- CA : Conditional Access
- CDM : Code Division Multiplexing
- C/I : Carrier to Interference
- DMB : Digital Multimedia Broadcasting
- EN : European Standard
- ES : Elementary Stream
- ETSI: European Telecommunications Standards Institute
- MPEG: Moving Picture Experts Group
- PN : Pseudo-random Noise
- PS : Pilot Symbol
- QPSK: Quadrature Phase Shift Keying
- RS : Reed-Solomon
- SI : Service Information
- TDM : Time Division Multiplexing
- TS : Transport Stream

1.Safety Precautions

1-1. Repair Precaution

Before attempting any repair or detailed tuning, shield the device from RF noise or static electricity discharges.

Use only demagnetized tools that are specifically designed for small electronic repairs, as most electronic parts are sensitive to electromagnetic forces.

Use only high quality screwdrivers when servicing products. Low quality screwdrivers can easily damage the heads of screws.

Use only conductor wire of the properly gauge and insulation for low resistance, because of the low margin of error of most testing equipment.

We recommend 22-gauge twisted copper wire.

Hand-soldering is not recommended, because printed circuit boards (PCBs) can be easily damaged, even with relatively low heat. Never use a soldering iron with a power rating of more than 100 watts and use only lead-free solder with a melting point below 250°C (482°F).

Prior to disassembling the battery charger for repair, ensure that the AC power is disconnected. Always use the replacement parts that are registered in the SEC system. Third-party replacement parts may not function properly.

1.Safety Precautions

1-2. ESD(Electrostatically Sensitive Devices) Precaution

Many semiconductors and ESDs in electronic devices are particularly sensitive to static discharge and can be easily damaged by it. We recommend protecting these components with conductive anti-static bags when you store or transport them.

Always use an anti-static strap or wristband and remove electrostatic buildup or dissipate static electricity from your body before repairing ESDs.

Ensure that soldering irons have AC adapter with ground wires and that the ground wires are properly connected.

Use only desoldering tools with plastic tips to prevent static discharge.

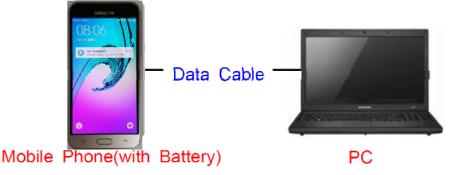
Properly shield the work environment from accidental electrostatic discharge before opening packages containing ESDs.

The potential for static electricity discharge may be increased in low humidity environments, such as air-conditioned rooms. Increase the airflow to the working area to decrease the chance of accidental static electricity discharges.

6-1. S/W Download

6-1-1. Prepare for S/W Downloading

- Diagram of connection



6-2-2. How to download S/W

1) Downloading Binary Files

- Binary file for downloading SM-J510FN
 - AP_XXXX.tar.md5
 - BL_XXXX.tar.md5
 - CP_XXXX.tar.md5
 - CSC_XXXX.tar.md5
 - (file size is about 2.2GB)

2) Prepare for Downloading

- Downloader Program (Odin3 v3.10.exe)
- SM-J510FN Mobile Phone
- Data Cable
- · Binary files

3) Boot the mobile phone by pressing 'Home + Vol Down + Power key at the same time, If you do properly, you can see the following message on the main LCD as the following.



4) Press the Vol Up Key again, and you will see below message on Main LCD.



5) Load the binary download program.

Odin3 v3.10.7			
Odin3 odin			PCS
ID:COM			
0 [COM680]	Files [Download]		
T Flash Phone EFS Clear Phone Bootloader Update AutoStart	Binary Size	art Reset	Mass D/L ►

6) Choose "RTN for Sprint"

Odin3 odin)
D-COM			
Log Options Pit	Pies (Download)		
Phone Bootloader Update AutoStart	Binary Size	Start Reset	Mass D/L +

7) Slect the file as above:

- AP_XXXX.tar.md5
- BL_XXXX.tar.md5
- CP_XXXX.tar.md5
- CSC_XXXX.tar.md5

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▶ 문서 ▶ 2016 J5 ▶ 바이너리 ▶ PC4	▼ 🍫 PC4 검색			
새 폴더				
문서 라이브러리 PC4				정렬 순서:
이름	수정한 날짜	양유	크기	
J5XNLTE_EUR_OPEN.pit	2016-03-11 오후 1:58	PIT 파일	5KB	
AP_J510FNXXE0APC4_CL7468788_QB8887385_REV00_eng_mid_noship_MULTI_CERT.tar.md5	2016-03-11 오후 2:01	MD5 파일	1,813,041	
BL_J510FNXXE0APC4_CL7468788_QB8887385_REV00_eng_mid_noship_MULTI_CERT.tar.md5	2016-03-11 오후 2:01	MD5 파일	14,411KB	
CSC_OXY_J510FNOXY0APC4_CL7468788_QB8887385_REV00_eng_mid_noship_MULTI_CERT.tar.md5	2016-03-11 오후 2:02	MD5 파일	106,971KB	
CP_J510FNXXE0APC4_CL7468788_QB8887385_REV00_eng_mid_noship_MULTI_CERT.tar.md5	2016-03-11 오후 2:02	MD5 파일	45,671KB	

7) Connect mobile and computer. The program show as follow.

📮 Odin3 v3.10.7	
Odin3 odin	
ID:COM	
Log Options Pit	Files [Download]
	BL C3_CL6236492_QB7076947_REV00_user_low_noship_MULTI_CERT.tar.md5
Auto Reboot RTN for Sprint Re-Partition	AP K3_CL6236492_QB7076947_REV00_user_low_noship_MULTI_CERT.tar.md5
F. Reset Time DeviceInfo	CP CP C3_CL6236492_QB7076947_REV00_user_low_noship_MULTI_CERT.tar.md5
Nand Erase All	CSC CSC CSC CSC CSC CS_CSC CS_CSC CSC CS
 Flash Lock T Flash 	UMS
Phone EFS Clear	
Phone Bootloader Update AutoStart	Binary Size 2490.7MB Mass D/L ►
	Start Reset Exit

8) Now press the button "Start".

9) Now it's time to take a rest and finish the downloading.

10) After finished downloading of phone binary, the mobile phone will restart automatically.

 11) Once the device boots up, you can check the version of the binary file or name by pressing the following code in sequence;
 *#1234#

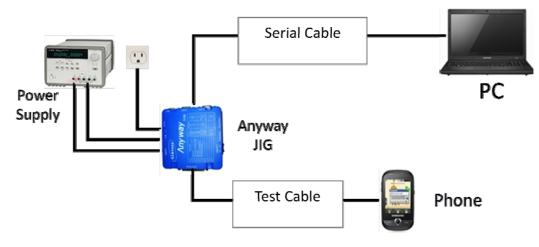
You can perform Factory Reset by Settings \rightarrow Accounts \rightarrow Backup and reset

% Caution. Never disconnect during the S/W downloading.

6-2 IMEI writing

6-2-1 Preparation

- New IMEI writing Program has been released.
- Supported Model : Models which CAB files are uploaded on HHPsvc INI File category, instead of ini file.
- Refer to below IMEI writing procedure.
 - H/W



- S/W

① Library Install	To use Daseul, library files should be installed. Refer to SVC Bulletin "(11-82) Daseul (New IMEI writing Program) Library Install guide_rev1.0"
2 Launcher	DASEUL_SVC_Launcher_v3_0_25 or higher -Uploaded on HHPsvc Notice
③ Runtime File	 DASEUL_IMEI_ALL_Runtime_3.1.136_r00183 .CAB or higher -Uploaded on HHPsvc Notice Make 'ModelName' folder at the same position with launcher & Runtime file. DASEUL_IMEI_ALL_Runtime_3.1.136.0_r00183.CAB DASEUL_Launcher_v3.0.25.exe SM-J510FN_IMEI_Ver_3.1.132.0.CAB
④Model File	Copy Model File under the 'Model Name' folder

6-2-2 IMEI writing Process

ASEUL Launche				22
auncher Statu: lo. Processin 1 ::: Start I		Status Complete	MODE :	Service -
elect Extract Pri [MODEL]] Runtime] SMD F/T] PBA F/T] Calibration] CAL 2nd] Final Auto] Final Auto] Final Auto] TMFT] WULN] GPS] B I]	System Se	
			Extra	ct & Run Close
o. Proc 1 ::: S	er for Service Ver 3,0,10	older	where 	the Launcher exists

elect Model JL Launcher for Service Ver 3,0,10 her Status >			×			
Processing	MODE : Status	Service	<u> </u>			
EXUACC PIOCESS						
DDEL] SM-J510FN	System :	Setting	_			
D.F/T						
pration			_			
il Auto			_			
EI SM-N910F_COMMON(CSC)_IMEI_1	/er_3.1.120.6.CAB					
	Ext	ract & Run	ose			
ge. From second r				-		
ge. From second r	un of the IME	I program	, check	IMEI	clic	
ge. From second r	un of the IME		, check	-	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing 1 Kil Program 2 Remove Old Files (0 Files)	un of the IME Ver 3,0,10	MOD Status Complete Complete	, check	IMEI	clic	
1 Kill Program	un of the IME Ver 3,0,10	MOD Status Complete	, check	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing 1 Kil Program 2 Remove Old Files (0 Files)	un of the IME Ver 3,0,10	MOD Status Complete Complete	, check	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing 1 Kil Program 2 Remove Old Files (0 Files)	un of the IME Ver 3.0.10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME	MOD Status Complete Complete ing	e: Se	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing 1 Kil Program 2 Remove Old Files (0 Files) 3 Extracting DASEUL_Runtime Select Extract Process -C:\Users\u00ed [MODEL] SM-J510FN	un of the IME Ver 3.0.10 _Ver_3.1.129.0.CAB File	MOD Status Complete Complete ing	, check	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing 1 Kil Program 2 Remove Old Files (0 Files) 3 Extracting DASEUL_Runtime Select Extract Process -C:\Users\u00ed [MODEL] SM-J510FN	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME	MOD Status Complete Complete ing	e: Se	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing Kill Program Remove Old Files (0 Files) Extracting DASEUL_Runtime Select Extract Process -C:\Users\u00effile Select Extract Process -C:\Users\u00effile Select Extract Process -C:\Users\u00effile Select Extract Process -C:\u00effile Select Extract	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME	MOD Status Complete Complete ing	e: Se	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing Kill Program Remove Old Files (0 Files) Extracting DASEUL_Runtime Select Extract Process -C:\Users\\ [MODEL] SM-J510FN Runtime DASEUL_Runtime SMD F/T PBA F/T Calibration CAU 2nd	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME	MOD Status Complete Complete ing	e: Se	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing Kill Program Remove Old Files (0 Files) Extracting DASEUL_Runtime Select Extract Process -C:\Users\us	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME	MOD Status Complete Complete ing	e: Se	IMEI	clic	
ge. From second r	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME	MOD Status Complete Complete ing	stem Setting	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing Kill Program Remove Old Files (0 Files) Extracting DASEUL_Runtime Select Extract Process -C:\Users\\\ [MODEL] SM-J510FN Runtime SMO F/T PBA F/T Calibration GAU 2nd Final Auto Final	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME @	MOD Status Complete Complete ing	stem Setting	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing Kill Program Remove Old Files (0 Files) Extracting DASEUL_Runtime Select Extract Process - C:\#Users\# (MODEL) SM-J510FN Runtime DASEUL_Runtime SMD F/T PBA F/T PBA F/T Calibration CAL 2nd Final Auto Fin	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME @	MOD Status Complete Complete ing	stem Setting	IMEI	clic	
ge. From second r DASEUL Launcher for Service Launcher Status > No. Processing Kill Program Remove Old Files (0 Files) Extracting DASEUL_Runtime Select Extract Process -C:\Users\\ (MODEL) SM-J510FN Runtime SMD F/T PBA F/T Calbration CAU 2nd Final Auto Final	un of the IME Ver 3,0,10 _Ver_3.1.129.0.CAB File Chi-HyeongWDesktopWIME @	MOD Status Complete Complete ing	stem Setting		clic	

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6. Check 'IMEI Write / IM	IEI Check', and click 'IMI	EI SVC & Repair Option'
Set System Set System Configuration	m Configuration	X
(Process] [Master] [Slave] Calib SMD F/T Image: Smoothed and the second and	ration CAL Cycle: on every 20 default CALs pration Mode : FDT 2nd Mode : FDT y RF Signal by Conduction by RF Signal by Conduction mode : Signaling Mode : WLan RFSM Second PC e ODS ge Felica Cal C Reset Reset C C	Name LTNE(temp) Type 1Person Cell IP Smart Cloud Cell Phone 1 Number 1 FJig 1
7. Check 'SVC , User Tic IMEI SVC && Repair Option	cket no and click OK	
FTR N/A -	Rework	□ Korean SVC
SVC User Ticket No 🗸	SELA MIAMI	Local FOTA Check
	🗌 Repair Board	SVC Factory Reset
🔲 Romania SVC	T Argentina SKD	
Initial PGM(SVC)	Turkey	
ATT Rework	Slovakia SVC	
IMEI Clear(Factory)	GED 2nd Inspection	
C Outgoing Inspection Check	SBSC(PBA) SVC	
		OK CANCEL

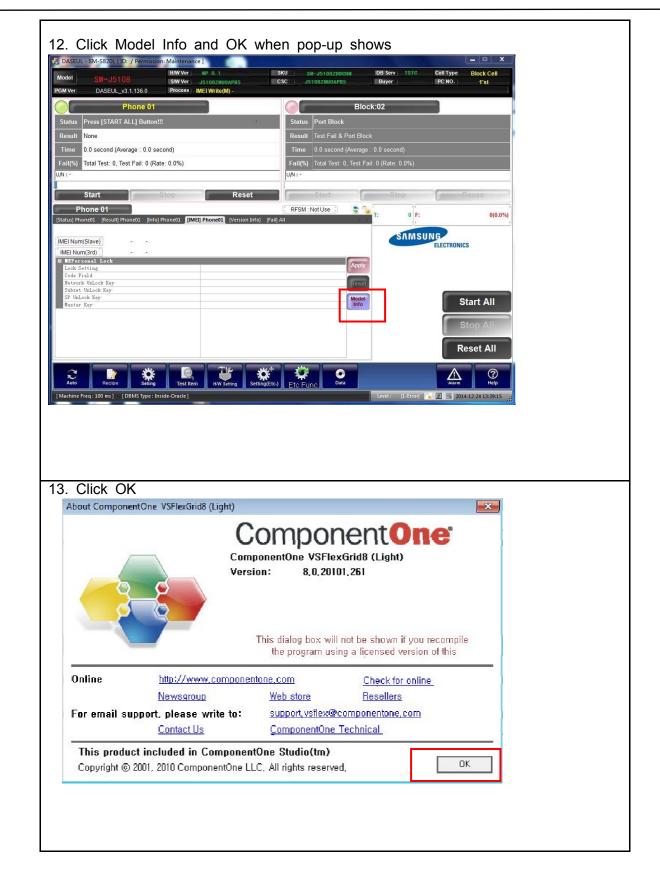
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8. Click 'Hardware C	onfig'			
	stem Configi	uration	-	X
Test Process [Master] [Slave] SMD F/T Image: SMD F/T PBA F/T Image: SMD F/T Calibration Image: SMD F/T Final Auto Image: SMD F/T IMEI Read Image: SMD F/T STA Check Image: SMD F/T STA Check Image: SMD F/T STA Check Image: SMD F/T Buetooth Image: SMD F/T ICIA Image: SMD F/T WLAN Image: SMD F/T Process Order Image: SMD F/T	Test Condition Calibration Real CAL Cycle: on every 20 @ de Calibration Mode : FDT CAL2nd Mode : FDT Final Supply RF Signal by Condu Reset Loss Correction Test Mode : Signaling WLAN Test Mode : WLan IMEI Use RFSM Use Second PC Save ODS Merge Felica Cal OQC Reset IBI Reset	foult CALs Foult CALs Line Name Line Type Une Type Start Number of UI Start Number of UI Start Number of Jig IP Address SKD Mode MultiSharing(C Developer Mode Advanced Sep	ition	Model Information Hardware Config Signal Loss Config.
9. Click 'Port Setting Hardwa Controller Type, 10 Bus 1	ire Componen	t Configuratio	n	
Phone Count I Co L/F - 1 Type Senal COM Co L/F - 2 Type N/A T/F Port Setting IF Jig Type AnywayJig Co Co	STS Sharing Controller unt 0 V ntrol Type N/A V Type Serial COM V erminal Port Setting bot / ShieldBox ntrol Type N/A V	Server HOME(GUMI) Type Outside-Socket Sarcode Reader Type N/A Fype Serial COM Port Setting	PBA F/T Function Test JIg NI-DAQ Power Detector HDMI JIG Port Se	tting
MSTS Count I/		IES PN Sender	SMD F/T Type N/A B'd Address 5 Port Se	Tting
I/F Type GPIB	Port Setting			NVE

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		No.		Port #1			
audRate	115200	- 1	1	FOIC#1	+		
ata Bit	8	T					
arity	No						
op Bit	1	Y				SAVE	ר
lick OK t		ed				Cancel	
Set S	Set Sys	stem Con	figuratio			Cancel	
Set S		stem Con Iration Dialog Test Condition Calibration][N System Config. Language English		Model	
t Process [Mast		stem Con Iration Dialog est Condition Calibration Real CAL Cycle: on ever		System Config.			
the process [Mast No F/T]	Set Sys System Configu er] [Slave]	stem Con Iration Dialog fest Condition Colbration Real CAL Cycle: on even][System Config. Language English		Model Information Hardware	
St Process st Process [Mast 4D F/T [] BA F/T [] albration []	er] [Slave]	stem Con Iration Dialog est Condition Calibration Real CAL Cycle: on ever 20	, T default CALs	System Config. Language English Line Name LINE(temp) Line Type Block Cel	_	Model	
St Process trocess] [Mast HD F/T [BA F/T] alibration [nal Auto [er] [Slave]	Stem Con Iration Dialog Test Condition Calibration Calibration Mode : Dyr	, T default CALs	System Config. Language English Line Name LINE(temp)		Model Information Hardware	
the process Set	er] [Slave]	stem Con ration Dialog est Condition Colibration Real CAL Cycle: on ever 20 Colibration Mode : Dyn Final	/ ▼ default CALs amic ▼	System Config. Language English Line Name LINE(temp) Line Type Block Cell # of Phone 1 Start Number 1	_	Model Information Hardware	
St Process trocess] [Mast HD F/T [BA F/T] alibration [nal Auto [er] [Slave]	stem Con ration Dialog est Condition Colibration Real CAL Cycle: on ever 20 Colibration Mode : Dyn Final	r default CALs amic v	System Config. Language English Line Name LINE(temp) Line Type Block Cell # of Phone 1 Start Number 1 1	•	Model Information Hardware	
Set Solution States Sta	er] [Slave]	Calibration Mode : Dyr Calibration Mode : Dyr	r default CALs amic ▼ Conduction ▼	System Config. Language English Line Name LINE(temp) Line Type Block Cell # of Phone 1 Start Number 1	•	Model Information Hardware	
Set Solution States Sta	er] [Slave]	stem Con ration Dialog est Condition Colibration Real CAL Cycle: on ever 20 Colibration Mode : Dyn Final	r default CALs amic ▼ Conduction ▼	System Config. Language English Line Name LINE(temp) Line Type Block Cell # of Phone 1 Start Number 1 1	•	Model Information Hardware	
Set Solution States Sta	er] [Slave]	Calibration Mode : Dyr Calibration Mode : Dyr	r default CALs amic ▼ Conduction ▼	System Config. Language English Line Name LINE(temp) Line Type Block Cell # of Phone 1 Start Number 1 1	•	Model Information Hardware	
St Process st Process [Mast MD F/T [albration [nal Auto [nal Manual [MEI Process MEI Process MEI Process MEI Check [DL+2nd Check [er] [Slave]	Stem Con Iration Dialog Set Condition Calibration — Real CAL Cycle: on ever 20 Calibration Mode : Dyr Final Supply RF Signal by Test Signal Mode : Signal	default CALs amic ¥	System Config. Language English Line Name LINE(temp) Line Type Block Cell # of Phone 1 Start Number 1 1	•	Model Information Hardware	
St Process st Process MD F/T albration nal Auto mal Manual MEI Process MEI Process MEI Check MEI Check DL Arework	er] [Slave]	Stem Con Iration Dialog Set Condition Calibration — Real CAL Cycle: on ever 20 Calibration Mode : Dyr Final Supply RF Signal by Test Signal Mode : Signal	default CALs amic ¥	System Config. Language English Line Name LINE(temp) Line Type Block Cell # of Phone 1 Start Number 1 1	•	Model Information Hardware Config	

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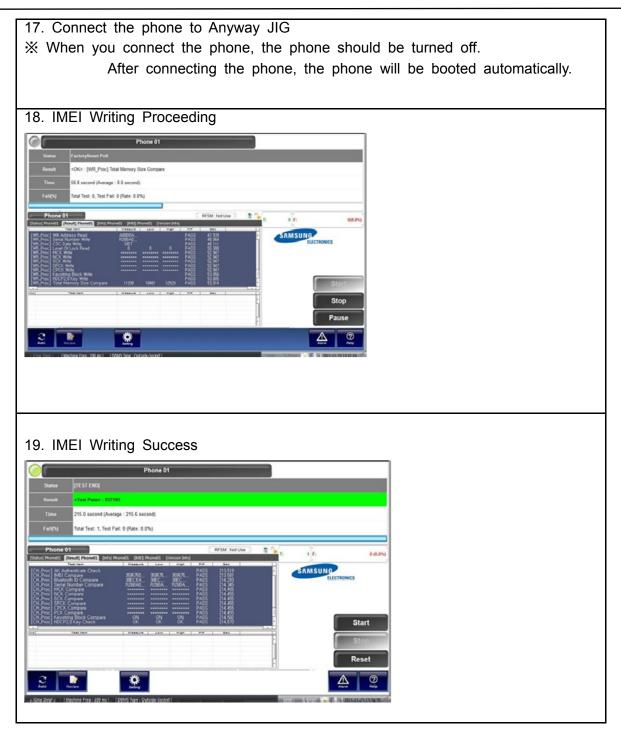
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) Model Infor	mation	
H/W Ver 1	MP 0.1	- Item Code
H/W Ver2		SM-J5108ZZDCHM
Use Test La	abel	
	Version	Basic Model Code
BOOT		T SIM SKU
PDA	J5108ZMU0APB3	Sensor Hub
PHONE	J5108ZMU0APB3	Comp. Engine Version
Memory		Contents Version
Hidden		Factory Binary Option
CSC	J5108ZMU0APB3	Factory - PDA Version FA51-J5108ZMU0APE3
Cam1	V13QLIA00SA	Factory - Phone Version J5108ZMU0APB3
Cam 1-1	V13QLIA00SA	Factory Reset + Check Pre Product
S_Cam1	D05QLIA00CA	
S_Cam1-1		MDL Rework
Touch1	N	SMD Test NV Write Main Repair
Touch1-1		STA Option
E-Write1		RF Pass Count 15
E-Write1-1		XML LOG Path
TSP 1	IM001005	Material Code
TSP 1-1	IM001003	Don't Upload DB
TSP2		
TSP2-1		PRL/ERI
Spare 1		PRL Version
Spare2		PRL File Name
OIS1		ERI Version
OIS1-1		ERI File Name

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15. Input IMEI Number and click Apply	
Model SN-J5108 SN Ver J51062200000 SN Ver J510622000000 DB Serv 1STC Cell Type Dioce Cell	
PSM Val DASFUI_A 1 36 () Process INFI Vinite(M) .	
Phone 01 ID Check Status Please Exit & Restart The Program.	
Result None	
Time 0.0 second (Average : 0.0 second) Fail(%) Total Test: 0, Test Fail: 0 (Rate: 0.0%)	
Phone 01 RFSM : Not Use T: 0 F: 0(0.0%) [Status] Phone01 [Infe] Phone01 [Urrsion Info] [Fail] All T: 0 F: 0(0.0%)	
IMEI Num [111111 - 11] - 11111 3 IMEI Num (Slave) SN Num	
MEINum(3rd) Apply - Apply - Apply - Apply	
Code Field Network UnLock Key Subset UnLock Key	
SP UnLack Key Master Key Start	
Stop	
Reset	
Auto Recto Semig Test Rem HW Sening Setting(Etc.) Etc Furne Data	
* [One Step] :: [Machine Freq : 100 ms] [DBMS Type : Outside-WebSVC]	
16. Click Start ALL Masseul - SM-S820L (ID: / Permission: Maintenance)	
Model SM-J5108 HW Veri SW-J51082000000 MP 0.1 SKU SM-J510820000000 IDB Serv Bayer TSTC Cell Type Block Cell Model SM-J51082 SW Ver J510824000PB5 CSC J510824000PB5 Bayer PC NO. 1'st	
PGM Ver DASEUL_v3.1.136.0 Process IMEI Write(M) - Phone 01 Block:02	
Status Press [START ALL] Button!!! Status Port Block Result None Result Test Fail & Port Block	
Time 0.0 second (Average : 0.0 second) Time 0.0 second (Average : 0.0 second)	
Fail(%) Total Test: 0, Test Fail: 0 (Rate: 0.0%) Fail(%) Total Test: 0, Test Fail: 0 (Rate: 0.0%) UN: - UN: - UN: - UN: -	
Start Stop Reset Start Stop Pause	
Phone 01 [RESult] Phone01 [Info] Phone01 [Info] Phone01 [Version Info] [Fail] All	
IMEI Num(Slave) - IMEI Num(3rd) -	
ElEPersonal Lock Apply Lock Satting Apply Code Field Apply	
Network Mulack Key Röset Subset UnLack Key Model SP Malack Key Model Master Key Model	
Stop All	
Reset All	
Auto Recipe Seizer Seizer Heip	
Auto Practice Gening Testition HW Setting Setting(Etc.) Etc Func. Data Auron Heip [Machine Freq : 100 ms] [DBMS Type : Inside-Oracle] Level: [1-Error] 2014-12-24 1339-15	

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6-3. RF Calibration

6-3-1. Required items in order to calibrate RF

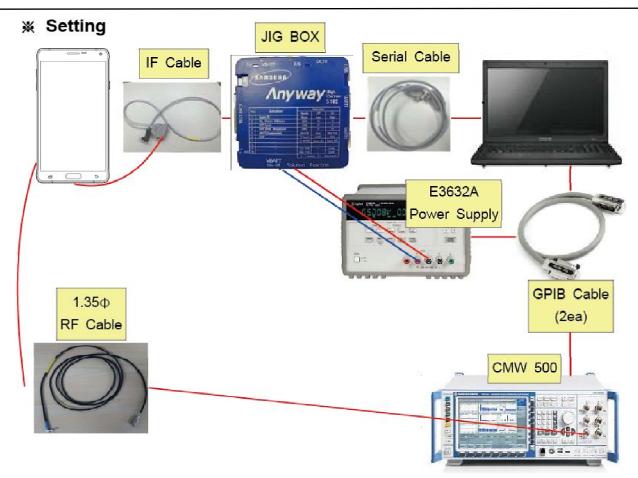
- Installation program: RF Calibration Program
 - Daseul_Launcher_vx.x.xx.exe
 - Daseul_CAL_ALL_Runtime_x.x.xxx.x.CAB
 - Model File (SM-J510FN_OPEN_CALIBRATION_Ver_3.1.131.0.CAB)
 - * It is required to use the latest program.
 - SM-J510FN Mobile Phone
 - R&S CMW500
 - E3632A Power Supply
 - JIG BOX (GH81-11888A)
 - Adapter (GH81-11888K)

- GPIB Cable (2ea)
- IF Cable (GH81-10952A)
- UART Serial Cable
- 1.35Φ RF Cable (GH81-11962G 1ea)

• Table of test cables

IF Cable	GH81-10631A	GH81-10952A	GH81-11171A	
	11 pin	7 pin (New)	7 pin (Old)	
	GH81-11962D	GH81-11962G	GH81-11962C	GH81-11962F
RF Cable (Manual)	1.35T, Short SMAP	1.35T, Long BNCP	1.6T, Short SMAP	1.6T, Long BNCP
	GH81-11962A	GH81-11962B	GH81-11962E	
4 Port Divider	Use / No use	Divider Cable	50Ω terminator	

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6-3-2. RF Calibration Program

1. Run the RF Calibration Program Launcher, 'DASEUL_Launcher_vx.x.xx.exe'.

DASEUL_CAL_ALL_Runtime_3.1.188.0_r00362.CAB

DASEUL_Launcher_v4.0.0.exe

- SM-J5108_OPEN_CALIBRATION_Ver_3.1.180.4.CAB
- 2. Check the 'Calibration' menu, and select 'Extract & Run'.

DASEUL Launch	ner Ver 3.0.29		×
Launcher Statu	s >		
No. Processin	g	Statu	IS
1 ::: Start	Normal Mode :::	Comp	lete
Select Extract P	rocess		
Runtime	DASEUL_Runtime_Ver_3.	1.181.0.CAB	
SMD F/T			7
Calibration	r00337 SM-J5108_OPEN	_CALIBRATION_Ver_3.1	.180.1TJ1
CAL 2nd			
🗌 Final Auto			
🗌 Final 2nd			
IMEI			
WLAN		1	A second
GPS			
BT			
	1	Extract & Run	Close
	and the second s		

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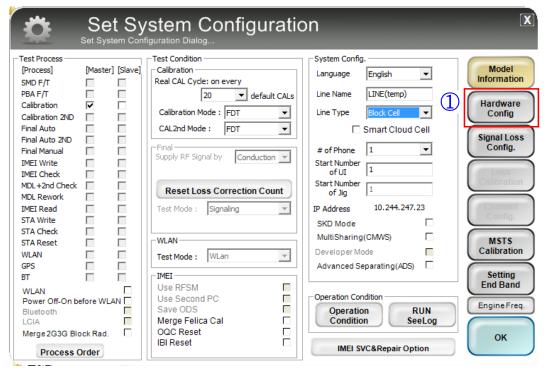
3. Check the 'CAL' and open the model file, then select 'Start' button.

elect The Sequent Deploy Patt				
SMD F/T	. C. DIST DASEUL			
PBA F/T				
CAL				
CAL2nd				
J开				123
查找范围(II)	SM-J5108_OPEN_CALL	IBRATION_Ver_3.1.18 -	+ 🖻 💣 📰	-
24	24		Pau	хцжа
最近访问的信置	SM-J5108_OPEN_(CALIBRATION_Ver_3.1.18		16/2/19 8:37
最近访问的位 盖 桌面	SM-J5108_OPEN_(CALIBRATION_Ver_3.1.18		and the second se
桌面	SM-J5108_OPEN_(CALIBRATION_Ver_3.1.18		and the second se
三 桌面	SM-J5108_OPEN_(CALIBRATION_Ver_3.1.18		and the second se
桌面 桌面 库 ()))	SM-J5108_OPEN_(CALIBRATION_Ver_3.1.18		and the second se
東面 東面 库 峰	SM-J5108_OPEN_(✓ 文件名 (30):	CALIBRATION_Ver_3.1.18		and the second se

4. Change the Line Type to 'Block Cell' and disable 'Smart Cloud Cell'.

	ystem Configuration	on	X
Test Process [Process] [Master] [Slave] SMD F/T □ PBA F/T □ Calibration ✓ Calibration 2ND □ Final Auto □ Final Auto □ Final Auto □ Final Manual □ IMEI Write □ IMEI Check □ MDL +2nd Check □ MDL Rework □ IMEI Read □ STA Check □ STA Check □ BT □ WLAN □ Power Off-On before WLAN □ Bluetooth □ LCIA □ Process Order □	Test Condition Calibration Real CAL Cycle: on every 20 default CALs Calibration Mode : FDT CAL2nd Mode : FDT Final For I Supply RF Signal by Conduction I Reset Loss Correction Count Test Mode : Test Mode : Signaling WLAN Image: Signal Sign	System Config. Language English Line Name LINE(temp) Line Type Block Cell Smart Cloud Cell # of Phone 1 Start Number 1	Model Information Hardware Config Signal Loss Config. Signal Loss Config. Config. MSTS Calibration Setting End Band Engine Freq. OK

5. Set the GPIB address of MSTS(CMW500) and Power Supply(E3632A) to enter 'Hardware Config' and 'Save'. (Check the GPIB address of equipments in advance)



Controller Type, IO I	Ware Component Configuration
Count 1	Count 0 Server HOME(GUMI) Configuration
I/F - 1 Type Serial COM 💌	Control Type N/A V Ty
I/F - 2 Type N/A 🗾	I/F Type Serial COM MSTS IO Bus Setting
Port Setting IF Jig Type AnyWayJig 💌	Common Eos o Switch Box Port Setting I/F Eos Type I/F Type Type
Multi Jig Cable Type UART Line 💌	Control Type N/A LC
2 'Jse Portable ID Check JIG	Image: Serial Conf. Image: Serial Conf. Image: Port Setting Image: Serial Conf.
MSTS Count 1	Power Supply Ty
	E3632A I/F Type GPIB Cancel
I/F Type GPIB	Port Setting Barometer I/O Type Serial COM Port Setting I/F Type Serial COM Port Setting
■ -11.41 = +1 = 1.41	5 SAVE Cancel

6. Press 'OK' to start RF Calibration after completing all settings.

Ö			ration		X
Test Process [Process] SMD F/T PBA F/T Calibration Calibration 2ND Final Auto 2ND Final Auto 2ND Final Manual IMEI Write IMEI Check MDL+2nd Check MDL Rework	[Master] [Slave]	Calibration Mode : FDT CAL2nd Mode : FDT Final Supply RF Signal by Conduction Reset Loss Correction Con	t CALs Line Name LIN ↓ Line Type R ↓ Sm ↓ of Phone 1 Start Number of UI 1 Start Number 1 Start Number 1 Start Number 1	Iglish	Model Information Hardware Config Signal Loss Config.
IMEI Read STA Write STA Check STA Reset WLAN GPS BT		WLAN Test Mode : WLan	IP Address 1 SKD Mode MultiSharing(CM Developer Mode Advanced Separe	MVS)	MSTS Calibration Setting
WLAN Power Off-On bef Bluetooth LCIA Merge 2G3G Bloo Process O	fore WLAN	Use RFSM Use Second PC Save ODS Merge Felica Cal OQC Reset IBI Reset	Operation Condition Operation Condition IMEI SVC&	RUN SeeLog	End Band Engine Freq.



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