

## **GSM TELEPHONE** GT-N7100

# SERVICE Manual

#### **GSM TELEPHONE**



#### **CONTENTS**

- Safety Precautions
- Specification 2.
- 3. Product Function
- 4. Exploded View and Parts list
- 5. MAIN Electrical Parts List
- Level 1 Repair
- 7. Level 2 Repair
- Level 3 Repair
- Reference data

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## 2. Specification

#### 2-1. GSM General Specification

	GSM850	EGSM 900	DCS1800	PCS1900	WCDMA 2100	WCDMA 1900	WCDMA 900	WCMDA 850
Freq. Band[MHz] Uplink/ Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	1922~1977 2112~2167	1852~1907 1932~1987	880~915 925~960	824~849 869~894
ARFCN range	128~251	0~124 & 975~1023	512~885	512~810	UL: 9612~9888 DL: 10562~1083 8	UL: 9262~9538 DL: 9662~9938	UL: 2712~2863 DL: 2937~3088	UL: 4132~4233 DL: 4357~4458
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	190MHz	80MHz	45MHz	45MHz
Mod. Bit rate/ Bit Period	270.833kbp s 3.692us	270.833kbp s 3.692us	270.833kbp s 3.692us	270.833kbp s 3.692us	3.84Mcps	3.84Mcps	3.84Mcps	3.84Mcps
Time Slot Period/ Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	FrameLengt h: 10ms Slotlength: 0.667ms	FrameLengt h: 10ms Slotlength: 0.667ms	FrameLengt h: 10ms Slotlength: 0.667ms	FrameLengt h: 10ms Slotlength: 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSKHQPS K	QPSKHQPS K	QPSKHQPS K	QPSKHQPS K
MS Power	33dBm~5dB m	33dBm~5dB m	30dBm~0dB m	30dBm~0dB m	24dBm~ -50dBm	24dBm~ -50dBm	24dBm~ -50dBm	24dBm~ -50dBm
Power Class	5pcl ~ 19pcl	5pcl ~ 19pcl	Opcl ~ 15pcl	Opcl ~ 15pcl	3(max+24dB m)	3(max+24dB m)	3(max+24dB m)	3(max+24dB m)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-106.7dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8	8	8	8	8
Cell Radius	35Km	35Km	2Km	2Km	2Km	2Km	2Km	2Km

#### 2-2. GSM Tx Power Class

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

## 3. Operation Instruction and Installation

#### Main Function

- · Android OS: JB
- HSPA+ 21Mbps / HSUPA 5.76Mbps
- 8MP AF with LED Flash
- 5.5 Super AMOLED MIPI (C-Type)
- A-GPS / BT v4.0 USB v2.0 / WiFi (802.11 a/b/g/n)
- Recording definition: 1080p / Playback at 1080p resolution
- · Sensors: Acceleration, Electromagnetic, Gyro, RGB, Proximity, Barometer
- Additional :
- 1.6GHz Quad Core CPU

### 6. Level 6 Repair

#### 6-1. S/W installation

#### 6-1-1. Required items in order to install S/W

- Installation program: Downloader Program (Odin3 v3.04.exe)
- GT-N7100 Mobile Phone
- Data Cable
- JIG BOX (GH99-36900B)
- RF TEST CABLE (GH39-00985A)
- OCTA LCD (GH97-13630A)
- JIG Cable (GH81-10631A)
- Adapter (GH99-38251A)
- Serial Cable
- · Mobile device specific S/W: Binary files

#### **X** Settings



Connect ANYWAY JIG BOX
with JIG CABLE (Phone to JIG)
or PC to Phone Using Data Cable

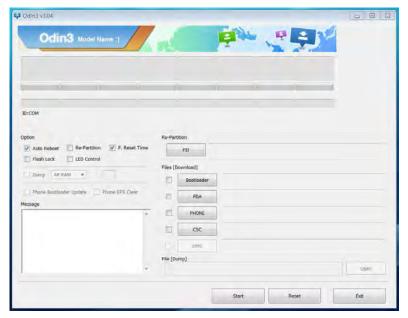






#### 6-1-2. S/W Installation Program (Downloader program)

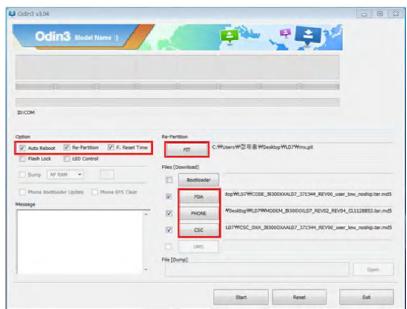
■ Open up the S/W Installation Program by executing the "Odin3 v3.04.exe"



- 1. Enable the check mark by click on the following options,
  - Check Re-Partition, Auto Reboot, and F. Reset Time
  - Check PIT
  - Check PDA, PHONE, and CSC Files

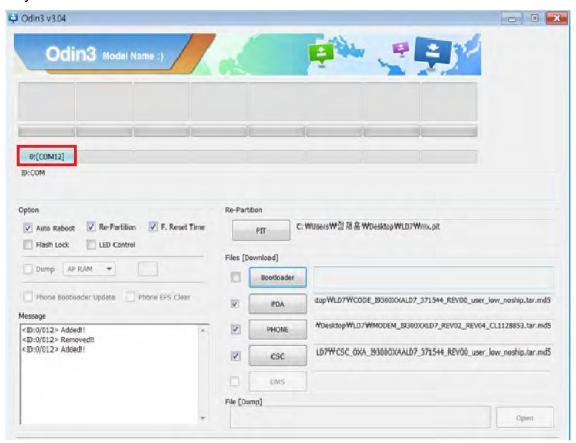
#### 2. Enter into Download Mode

- Enter into Download Mode by pressing Volume Down button, Home Key and ON/OFF Button simultaneously. And then, press Volume UP button in Warning Page to enter the Download Mode.

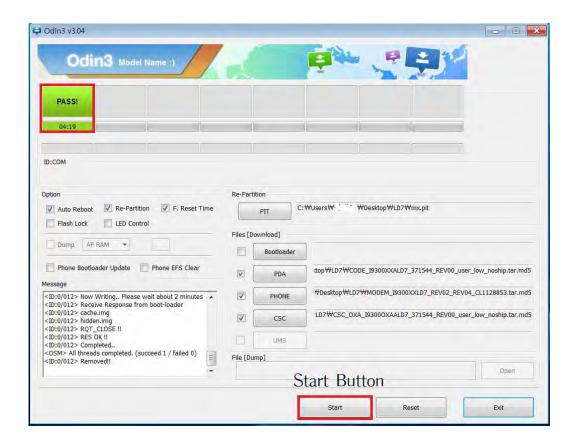




3. Connect the device to PC via Data Cable. Make sure that the one of communication port [ID:COM] box is highlighted in light blue. The device is now connected with the PC and ready to download the binary file into the device.



**4**. Start downloading binary file into the device by clicking Start Button on the screen. the green colored "PASS!" sign will appear on the upper-left box if the binary file has been successfully downloaded into the device.



- 5. Disconnect the device from the Data cable.
- 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 full reset by pressing the following code in sequence; \*2767\*3855#

#### 9. Reference Abbreviate

#### Reference Abbreviate

- —AAC: AdvancedAudioCoding.—AVC: AdvancedVideoCoding.
- -BER: BitErrorRate
- -BPSK: BinaryPhaseShiftKeying
- —CA: ConditionalAccess
- —CDM: CodeDivisionMultiplexing
- -C/I: CarriertoInterference
- —DMB: DigitalMultimediaBroadcasting
- —ETSI: EuropeanTelecommunicationsStandardsInstitute
- -MPEG: MovingPictureExpertsGroup
- -PN: Pseudo-randomNoise
- -PS: PilotSymbol
- -QPSK: QuadraturePhaseShiftKeying
- —RS: Reed-Solomon—SI: ServiceInformation
- —TDM: TimeDivisionMultiplexing
- -TS: TransportStream

### 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.



#### 1-2. 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.

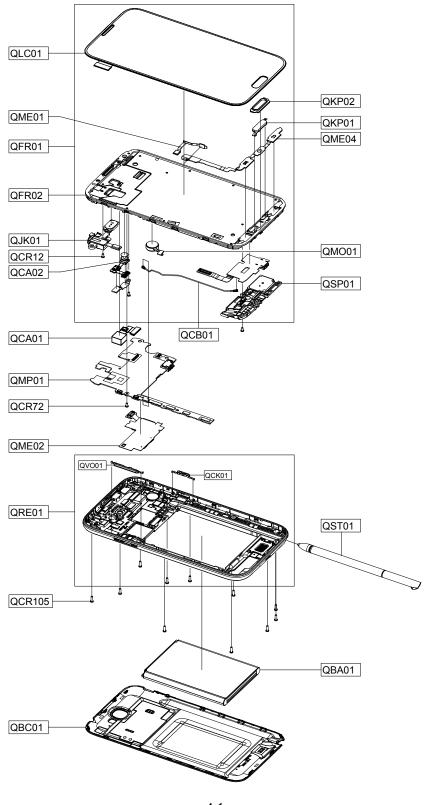
Use only desoldering tools with plastic tips to prevent static discharge.

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.

## 4. Exploded View and Parts List

## 4-1. Cellular phone Exploded View



## 5. MAIN Electrical Parts List

Design LOC	SEC CODE	Description
D501	0403-001688	USFZ5.6V-RTK/H
ZD501,ZD604	0406-001267	RCLAMP0521P
U506	0406-001369	RCLAMP3654P.TCT
ZD500	0406-001390	PESD24VS1UL
ZD602,ZD603,ZD605,ZD606,ZD 607,ZD608,ZD609,ZD700	0406-001459	RD1301B
ZD702,ZD703,ZD704	0406-001506	UCLAMP0541Z
ZD705	0406-001506	UCLAMP0541Z
D500	0406-001526	PTVS26VS1UR
U501	0504-001176	EMD5T2R
Q021,Q200,Q600	0505-002384	PMR280UN
LED500	0601-003079	SPFCW04301BLS0D0T0
U302	0801-003024	TC7SG32AFS
U605	0801-003437	NL17SG32P5T5G
U204	0903-001837	AT32UC3L0128-D1HR
U707	1001-001394	NLAS5123MNR2G
U604	1001-001650	DG2750DN-T1-E4
F101	1001-001715	XM2400SB-DL1201
U603	1003-002337	AN30259A
U808	1003-002431	NLSX5014MUTAG
U803,U807	1003-002469	FXMA2102UMX
U210	1201-003378	SFMG2S0D001
U103	1201-003400	RF6261B
U606,U700	1202-001120	NCX2200GM
U600,U701,U702,U703	1203-004819	RP103K281D-TR
U801	1203-004925	RP103K301D-TR
U104	1203-006801	RF6590
U806	1203-006874	RP154L006A-E2
U710	1203-007142	AAT2146MIJS-0.6-T1
U708	1203-007294	RP114K331D-TR
U505	1203-007321	MAX77693EWQ+T
U502,U504	1203-007323	MAX14607EWL+T
U805	1203-007324	RP114K121D-TR
U102	1203-007333	RF6561A
U704	1203-007408	TPS65632A
U500	1203-007657	MAX77686GEWE+T

Design LOC	SEC CODE	Description
U602	1204-003328	ES305B
U709	1204-003364	S5C73M3X01-Y040
U226	1204-003365	SI4705-D50-GM
U400	1205-003611	TPS22922YFPR
U800	1205-004233	SII9244BO
U601	1205-004509	WM1811AECS
UCP300	1205-004511	PMB9811C
U503	1205-004513	SIP32408DNP-T1-GE4
U101	1205-004515	PMB5712A2
U802	1205-004643	W9001
U228	1205-004646	PN65OEV
U232	1205-004649	BCM4752IUB2G
U200	1209-002124	AK8963C
U230	1209-002149	LSM330DLC
U231	1209-002167	BMP182
U809	1301-002097	ICE40LP1K-CM36
V100	1404-001726	NCP03XH223E05RL
TH300,TH400,TH401	1404-001728	NCP03WB473J05RL
V601,V602,V603,V700,V701	1405-001183	AVLC5S01033
V600	1405-001296	IECS0505C040FR
R214	2007-000141	RC1005J222CS
R104	2007-003010	RC1005J200CS
R307,R762	2007-007107	RC1005F1003CS
R623	2007-007134	RC1005F393CS
R477	2007-007136	RC1005F472CS
R444	2007-007142	RC1005F103CS
R651	2007-007573	RK73H1ETP3303F
R515,R731,R732,R804	2007-007741	M5534204B10E0R
R761	2007-007798	RC1005F0100CS
R416,R652	2007-007942	RC-1005F105CS
R218,R329,R817,R818,R823,R 824,R825,R838	2007-008045	ERJ1GEJ101C
R209,R811,R812	2007-008048	ERJ1GENJ201X
R211,R212,R456,R457,R458,R 706,R816,R819,R820,R826,R82 7,R828,R829,R833,R834	2007-008052	ERJ1GENJ472X
R207,R412,R413,R414,R415,R 461,R464,R513,R602,R605,R60 6,R712,R805,R808,R809	2007-008055	ERJ1GENJ104X

Design LOC	SEC CODE	Description
R221	2007-008117	ERJ2RKF2701X
R527	2007-008403	RC1005F364CS
R451,R452,R803	2007-008419	ERJ1GEJ102C
R512,R639,R650,R708	2007-008420	RMC-1/20-330JPA
R437,R438,R445,R446	2007-008478	RMC1/20152JPA
R201,R202,R203,R204,R205,R 528,R529,R530,R531	2007-008483	RMC1/20473JPA
R500,R504,R523	2007-008486	ERJ1GEJ204C
R319,R402,R403,R406,R408,R 409,R410,R422,R423,R455,R46 3,R465,R475,R516,R532,R600, R630,R635,R638,R660,R704,R 800,R806,R810,R814,R832,R83 5,R836,R837	2007-008516	ERJ1GEJ103C
R105,R206,R321,R471	2007-008531	MCR006MZPJ0100
R213,R216,R217,R227,R228,R 305,R306,R330,R331,R332,R72 1,R722,R729,R730	2007-008588	MCR006YZPJ222
R735	2007-008736	RC1005F150CS
R509,R525,R526	2007-008774	ERJ1GEJ2R2C
R503	2007-008798	MCR006YZPJ153
R435,R436,R468,R469	2007-008800	MCR006MZPF2002
R112	2007-008806	RC0603J510CS
R219,R220,R223,R421,R424,R 501,R502,R616,R617,R710,R71 1,R801	2007-009084	MCR006YZPJ105
R334	2007-009155	MCR006YZPJ474
R417,R418,R419,R420,R443,R 728,R736,R763	2007-009157	MCR006YZPF1003
R815,R831	2007-009158	MCR006MZPF1503
R308,R309,R310,R311,R312,R 313,R314,R315	2007-009171	MCR006YZPJ513
R317	2007-009171	MCR006YZPJ513
R764	2007-009201	MCR006YZPJ300
R640,R641	2007-009208	MCR006YZPJ160
L208,R610	2007-009212	MCR006YZPF1001
R505	2007-009314	MCR006MZPJ334
R304	2007-009315	RC0603J4R7CS
R425,R426,R427,R428,R429,R 430,R431,R432,R433,R434,R44 7,R448,R453,R454,R459,R460	2007-009408	ERJ1GEF222C
R619,R620	2007-009408	ERJ1GEF222C

R102,R103         2007-009801         MCR006YZPF1000           R511,R707         2007-009866         MCR006YZPF2003           R441,R442,R466,R467         2007-009920         RC0603F241CS           R462         2007-009964         MCR01MZP5F44R2           R612         2007-009969         MCR006YZPF1201           R507         2007-010202         RC0603F473CS           R318         2007-010233         RC1005F4021CS           C120         2203-000254         GRP155R71C103K           C204         2203-000330         GRP155F71H102K           C586         2203-000438         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP155R71E682KA01E           C585         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005729 <td< th=""><th>Design LOC</th><th>SEC CODE</th><th>Description</th></td<>	Design LOC	SEC CODE	Description
R441,R442,R466,R467         2007-009920         RC0603F241CS           R462         2007-009964         MCR01MZP5F44R2           R612         2007-009969         MCR006YZPF1201           R507         2007-010202         RC0603F473CS           R318         2007-010233         RC1005F4021CS           C120         2203-000254         GRP155R71C103K           C204         2203-000330         GRP1555C1H120J           C215         2203-000438         GRP155R71H02K           C586         2203-000725         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	R102,R103	2007-009801	MCR006YZPF1000
R462         2007-009964         MCR01MZP5F44R2           R612         2007-009969         MCR006YZPF1201           R507         2007-010202         RC0603F473CS           R318         2007-010233         RC1005F4021CS           C120         2203-000254         GRP155R71C103K           C204         2203-000330         GRP1555C1H120J           C215         2203-000438         GRP155R71H102K           C586         2203-000725         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	R511,R707	2007-009866	MCR006YZPF2003
R612         2007-009969         MCR006YZPF1201           R507         2007-010202         RC0603F473CS           R318         2007-010233         RC1005F4021CS           C120         2203-000254         GRP155R71C103K           C204         2203-000330         GRP1555C1H120J           C215         2203-000438         GRP155R71H102K           C586         2203-000725         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	R441,R442,R466,R467	2007-009920	RC0603F241CS
R507         2007-010202         RC0603F473CS           R318         2007-010233         RC1005F4021CS           C120         2203-000254         GRP155R71C103K           C204         2203-000330         GRP1555C1H120J           C215         2203-000438         GRP155R71H102K           C586         2203-000725         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E390JD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	R462	2007-009964	MCR01MZP5F44R2
R318         2007-010233         RC1005F4021CS           C120         2203-000254         GRP155R71C103K           C204         2203-000330         GRP1555C1H120J           C215         2203-000438         GRP155R71H102K           C586         2203-000725         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	R612	2007-009969	MCR006YZPF1201
C120         2203-000254         GRP155R71C103K           C204         2203-000330         GRP1555C1H120J           C215         2203-000438         GRP155R71H102K           C586         2203-000725         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	R507	2007-010202	RC0603F473CS
C204         2203-000330         GRP1555C1H120J           C215         2203-000438         GRP155R71H102K           C586         2203-000725         GRP155R71H392KA01E           C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	R318	2007-010233	RC1005F4021CS
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C581         2203-001101         GRP155R71E682KA01E           C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C 649         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C 703,C704         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	C215	2203-000438	GRP155R71H102K
C585         2203-001239         GRP1555C1H820JD01E           C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C 649         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C 703,C704         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	C586	2203-000725	GRP155R71H392KA01E
C216         2203-002668         C1005CG1H0R5BT           C138,C160,C162,C199,C572,C 649         2203-005682         GRP0335C1E330JD01E           C816,C821,L120,L122         2203-005683         GRP0335C1E8R0DD01E           C118         2203-005719         GRP0335C1E390JD01E           C210,C297,C299,C506,C507,C 703,C704         2203-005725         GRP0335C1E220JD01E           C169,C248,C249,C628,C632         2203-005726         GRM0335C1E560J           C219,C227,C580         2203-005727         CL03C120JA3GNNC	C581	2203-001101	GRP155R71E682KA01E
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649       2203-005682       GRP0335C1E330JD01E         C816,C821,L120,L122       2203-005683       GRP0335C1E8R0DD01E         C118       2203-005719       GRP0335C1E390JD01E         C210,C297,C299,C506,C507,C 703,C704       2203-005725       GRP0335C1E220JD01E         C169,C248,C249,C628,C632       2203-005726       GRM0335C1E560J         C219,C227,C580       2203-005727       CL03C120JA3GNNC	C216	2203-002668	C1005CG1H0R5BT
C118       2203-005719       GRP0335C1E390JD01E         C210,C297,C299,C506,C507,C       2203-005725       GRP0335C1E220JD01E         C169,C248,C249,C628,C632       2203-005726       GRM0335C1E560J         C219,C227,C580       2203-005727       CL03C120JA3GNNC		2203-005682	GRP0335C1E330JD01E
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C442,C443,C655,C656 2203-005731 GRM0335C1E180J	C442,C443,C655,C656	2203-005731	GRM0335C1E180J
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C139,C202,C212,C760 2203-005736 GRP0335C1E101JD01E	C139,C202,C212,C760	2203-005736	GRP0335C1E101JD01E
C107 2203-005789 ECJZEC1E0R5B	C107	2203-005789	ECJZEC1E0R5B
C129,C195 2203-005792 CL03C1R5CA3GNNC	C129,C195	2203-005792	CL03C1R5CA3GNNC
C131,C236,C264,C738 2203-005806 GRP033R71C102KD01E	C131,C236,C264,C738	2203-005806	GRP033R71C102KD01E
C110,C312,C453,C803 2203-006048 GRM155R71A104K	C110,C312,C453,C803	2203-006048	GRM155R71A104K
C207,C263 2203-006123 GRM0335C1E5R6CD01D	C207,C263	2203-006123	GRM0335C1E5R6CD01D
C801,C807,C810,C812 2203-006141 GRM188R61C105K	C801,C807,C810,C812	2203-006141	GRM188R61C105K
C333 2203-006190 GRM155R60J224KE01E	C333	2203-006190	GRM155R60J224KE01E
C137,C295,C336,C338,C601,C 2203-006194 GRP033R70J103KA01E		2203-006194	GRP033R70J103KA01E
C117,C132 2203-006260 GRM155R61A224KE19E	C117,C132	2203-006260	GRM155R61A224KE19E

Design LOC	SEC CODE	Description
C218,C237,C238	2203-006305	CM03CG100J25AH
C213	2203-006318	GRP0335C1E1R2CD01
C817	2203-006324	GRM188R61A225KE19D
C128	2203-006379	GRP033R70J472KA01
C168	2203-006410	CL03C1R8CA3GNNC
C134,C148,C180,C181,C182,C 183,C184,C189, C190,C191,C203,C217,C220,C 224,C225,C226, C228,C231,C232,C234,C250,C 253,C255,C293,C301,C302,C30 6,C309,C310,C314,C316,C317, C318,C319,C322,C323,C325,C 326,C327,C330,C331,C332,C33 4,C335,C339,C340,C346,C400, C403,C407,C413,C422,C439,C 441,C448,C501,C502,C505,C56 6,C579,C612,C614,C651,C652,C660,C756,C804,C805,C806,C 814,C818,C822,C823,C829,C83 0,C831,C832,C833,C834,C835,C836	2203-006423	GRM33X5R104K6.3
C241,C244	2203-006556	GRM0335C1E470JD01D
C173,C174,C221,C222,C621,C 622,C714,	2203-006562	CV05X5R105K10AH
C240,C243,C414,C416,C420	2203-006642	GRM033R71E331KA01D
C185,C186,C187,C192	2203-006647	GRM033R60J473KE19D
C449,C731	2203-006668	GRM033R61A222K
C130,C133,C590	2203-006815	GRM033R70J682K
C178,C179	2203-006824	CV105X5R475K10AT
C149,C150,C209,C247,C252,C 558,C561,C570,C734	2203-006839	CL03A104KP3NNNC

Design LOC	SEC CODE	Description
C230	2203-006844	CV05X5R474K10AH
C114,C116,C175,C188,C298,C 342,C406,C412,C424,C430,C43 7,C438,C440,C526,C529,C530, C534,C538,C539,C544,C545,C 639,C641,C642,C730,C737,C74 0,C746,C749,C800,C802,C811,	2203-006872	GRM155R60J225ME15D
C103,C157,C158,C194	2203-006896	GRM033R71E121KA01D
C100,C101,C568	2203-006979	CL03B103KP3NNNC
C450,C452	2203-006994	CL03B332KP3NNNC
C726	2203-007133	CL21A106KOCLRNC
C140	2203-007194	CL03C6R8BA3GNNC
C176,C300,C305,C307,C311,C 315,C320,C324,C328,C329,C34 1,C347,C503	2203-007210	CV03X5R224K06AH
C431,C547,C548,C549,C550,C 551	2203-007240	CL10A226MQ8NRNE
C343,C345,C718,C719	2203-007269	CL21A226MPCLRNC
C710,C713	2203-007270	CL10A106KP8NNNC
C172,C177,C211,C401,C404,C 408,C421,C434,C521,C523,C52 4,C525,C542,C543,C546,C552, C615,C616,C619,C627,C758,C 759	2203-007317	CV05X5R475M06AH
C251,C423,C427	2203-007385	CL05A106MR5NRNC
C815	2203-007391	CL03A474KQ3NNNH
C144,C313	2203-007393	CL05A475KP5NRNC
C200,C229,C233,C235,C291,C 292,C296,C321,C402,C405,C40 9,C410,C411,C415,C417,C418, C419,C425,C426,C428,C429,C 432,C433,C435,C436,C444,C44 5,C446,C447,C519,C527,C528, C531,C532,C533,C535,C536,C 537,C540,C541,C565,C567,C57 1,C576,C583,C600,C602,C604, C606,C607,C610,C613,C617,C 618,C644,C650,C654,C706,C70 7,C708,C720,C721,C722,C723, C724,C725,C752,C753,C808,C 809,C813,C819,C820,C824,C82 5,C826,C827,C828	2203-007449	CL03A105MQ3CSNH
C562,C573,C587,C589	2203-007456	CL05A105KA5NQNC
C254	2203-007474	CL05A106MQ5NUNC
C337	2203-007775	CV05X5R475M10AH
C559	2203-007781	CL10A226MP8NUNE

Design LOC	SEC CODE	Description
C555,C556	2203-007795	CL05A106MP5NUNC
C147,C257,C258,C553,C574,C 575,C623,C625,C626,C634,C63 7,C638,C640,C643,C711,C712, C751	2203-007796	CL03A105MP3NSNC
C736,C745,C750	2203-008095	CL03A224KP3NNNC
C735,C739,C741,C743,C744,C 748	2203-008097	CL03A104KA3NNNC
R224,R225	2203-008192	CL05A106MP5NUNZ
C256,C588,C757	2203-008243	CL03A103KA3NNNC
C508,C611	2203-008525	CL10A475KP9NHBC
C716	2203-008526	CL21A106KOCL3RC
C111,C112,C167,C303,C304,C 308,C513,C514,C515,C516,C51 7,C715	2203-008527	CL05A106MP8NUB8
C560,C564	2203-008528	CL10A226MPMNUBE
C122,C165,C206,C509,C510,C 511,C512,C518,C520,C522,C55 4	2203-008529	CL05A475MP7NRBC
TA500,TA501	2404-001506	TCTP1A476M8R-D
TA600	2404-001561	298D336X06R3M2T
TA100	2409-001127	TEPSLJ1A225M8R
C500	2409-001243	CPH3225A/PAS3225P
L515	2703-001231	LK1608-100K-T
L514,L516,L710	2703-002309	CIH05T82NJNC
L124,L127	2703-002596	LQW15AN15NH00D
L118	2703-002958	CIH03T56NJNC
L102	2703-003004	LLV0603-F47NJ
L207	2703-003476	LQG15HSR27J02D
L713	2703-003685	CIG21L4R7MNE
L500,L507,L508,L509	2703-003687	CIG21L1R0MNE
L123,L125,L126	2703-003755	MIPSZ2012D4R7-SS
L302,L303	2703-003869	LQM2HPN3R3MGCL
L704,L707	2703-003897	1239AS-H-4R7N
L105	2703-003911	CIG22H1R0MNE
L111,L119,L129	2703-004000	LQP03TN47NJ02D
L131,L142,L143	2703-004035	LQP03TN3N3B02D
L106	2703-004039	LQW15CN18NJ00D

Design LOC	SEC CODE	Description
L613,L614	2703-004193	HK0603R10J-T
C197,L134	2703-004287	CIH03S3N9BNC
L100,L113,L114,L223	2703-004289	CIH03S2N2BNC
L501,L502,L503,L504,L505,L50 6,L510,L513	2703-004297	CIG22E1R0MNE
L104,L110,L138,L140	2703-004299	AML0603E1N8BT
L133	2703-004300	CIH03S1N5BNC
L132	2703-004301	CIH03S1N2BNC
L137,L139,L144,L145	2703-004302	AML0603E1N0BT
L204	2703-004338	LQM18PN2R5ND0D
L209,L210	2703-004344	CIL10NR33JNC
L107	2703-004363	LQP03TG18NJ02D
L109	2703-004365	LQP03TG22NJ02D
L128	2703-004366	LQP03TG6N8J02D
L115,L117,L136,L222	2703-004367	LQP03TG8N2J02D
L141,L219	2703-004368	LQP03TG15NJ02D
L135	2703-004369	LQP03TG4N7J02D
L130	2703-004371	LQP03TG10NJ02D
L703	2703-004543	1239AS-H-100N-P2
OSC201	2801-004339	FC-135(0.032768MHz)
OSC100	2801-004931	SQ2D02600B2HBG
OSC200	2801-005107	SQBD03740M2HBG
OSC400	2801-005163	SQBD02400D2JCG
OSC800	2801-005213	SQ3D01600B2IBA
OSC500	2801-005219	CM21232768DZFT
OSC202	2802-001287	XRCGB27M120F3M10R0
OSC203	2809-001374	KT2520F26000ACW18TAK
F500	2901-001625	ICMEF112P900MFR
F200	2904-002085	SFHG89DQ102
F103	2904-002091	SFW881YB002
F102	2904-002107	SFW942YY402
F100	2910-000190	SAPHU836MAJ0F00
U100	2911-000219	RF6361A
MIC600	3003-001138	SPU0410LR5H-QB
L607	3301-001534	BLM15AG121SN1D
L802,L803	3301-001659	BLM15AG601SN1

L700,L701,L712,L800,L801   3301-001729   BLM15AG102SN1D   L702,L705,L706   3301-001789   BLM15EG121SN1D   BLM15EG121SN1D   L206   3301-001812   BLM15HD102SN1   L601,L602,L603,L604,L605,L61   3301-001885   BLM15HD182SN1D   L200   3301-001895   BLM03AG601SN1D   L300,L301,L512   3301-001929   BLM15AG100SN1D   L300,L301,L512   3301-002037   BLM18KG601SN1   L511   3301-002037   BLM18KG601SN1   L116   3301-002062   BLM19HE102SN1D   L609,L610   3301-002078   BLM15AX102SN1D   L608,L610   3301-002078   BLM15AX102SN1D   L608   3301-002122   BLM15PX121SN1   TAC600,TAC601   3404-001303   L512K2-T   TAC603   3409-001191   SPVN110101   SPVN110101   SPVN110101   SPVN11001   SPVN11001   SPVN11001   SPVN110101   SPVN11001   SPVN110	Design LOC	SEC CODE	Description
L206         3301-001812         BLM15HD102SN1           L601,L602,L603,L604,L605,L61         3301-001885         BLM15HD182SN1D           L200         3301-001895         BLM03AG601SN1D           L600         3301-001929         BLM15AG100SN1D           L300,L301,L512         3301-001956         BLM21PG220SN1D           L511         3301-002037         BLM18KG601SN1           L116         3301-002062         BLM15AX102SN1D           L609,L610         3301-0020278         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE632124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HDC601,HDC703         3711-007467         AXE620124AW1           HDC500         3711-007467         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501	L700,L701,L712,L800,L801	3301-001729	BLM15AG102SN1D
L601,L602,L603,L604,L605,L61         3301-001885         BLM15HD182SN1D           L200         3301-001895         BLM03AG601SN1D           L600         3301-001929         BLM15AG100SN1D           L300,L301,L512         3301-001956         BLM21PG220SN1D           L511         3301-002037         BLM18KG601SN1           L116         3301-002062         BLM18HE102SN1D           L609,L610         3301-002122         BLM15FX121SN1           L608         3301-002122         BLM15FX121SN1           TAC600,TAC6011         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE632124AW1           HDC601,HDC703         3711-007332         AXE64124AW1           HDC601,HDC703         3711-007467         AXE632124AW1           HDC500         3711-007629         KQ038P-3R           HDC600,HDC800         3711-007810         AXE410124AW1           HDC501         3711-008049         AXT420124AW1           HDC502	L702,L705,L706	3301-001789	BLM15EG121SN1D
2         3501-001689         BLM03AG601SN1D           L200         3301-001895         BLM03AG601SN1D           L600         3301-001999         BLM15AG100SN1D           L300,L301,L512         3301-001956         BLM2PG220SN1D           L511         3301-002037         BLM8KG601SN1           L116         3301-002078         BLM15AX102SN1D           L609,L610         3301-002078         BLM15AX102SN1D           L608         3301-002122         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC5001         3711-008049 <t< td=""><td>L206</td><td>3301-001812</td><td>BLM15HD102SN1</td></t<>	L206	3301-001812	BLM15HD102SN1
L600         3301-001929         BLM15AG100SN1D           L300,L301,L512         3301-001956         BLM21PG220SN1D           L511         3301-002037         BLM18KG601SN1           L116         3301-002062         BLM18HE102SN1D           L609,L610         3301-002122         BLM15AX102SN1D           L608         3301-002122         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HC500         3711-007667         AXE620124AW1           BTC500         3711-007810         AXE616124AW1           HDC501         3711-007810         AXE616124AW1           HDC501         3711-008049         AXT420124AW1           HDC501         3711-008049         AXE440124AW1           ANT500,ANT501         3712-001373		3301-001885	BLM15HD182SN1D
L300,L301,L512         3301-001956         BLM21PG220SN1D           L511         3301-002037         BLM18KG601SN1           L116         3301-002062         BLM18HE102SN1D           L609,L610         3301-002078         BLM15AX102SN1D           L608         3301-002122         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-00701         AXE622124AW1           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC501         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           HDC501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157	L200	3301-001895	BLM03AG601SN1D
L511         3301-002037         BLM18KG601SN1           L116         3301-002062         BLM18HE102SN1D           L609,L610         3301-002078         BLM15AX102SN1D           L608         3301-002122         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE632124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007322         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008376         AXE440124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157	L600	3301-001929	BLM15AG100SN1D
L116         3301-002062         BLM18HE102SN1D           L609,L610         3301-002078         BLM15AX102SN1D           L608         3301-002122         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007810         AXE616124AW1           HDC500,HDC800         3711-008049         AXT420124AW1           HDC501         3711-008049         AXE440124AW1           HDC501         3711-008376         AXE440124AW1           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02	L300,L301,L512	3301-001956	BLM21PG220SN1D
L609,L610         3301-002078         BLM15AX102SN1D           L608         3301-002122         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS202         GH61-02010A         SUS-T0-3G-TOP-3           SUS202         GH61-0202	L511	3301-002037	BLM18KG601SN1
L608         3301-002122         BLM15PX121SN1           TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC501         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02	L116	3301-002062	BLM18HE102SN1D
TAC600,TAC601         3404-001303         LS12K2-T           TAC603         3409-001191         SPVN110101           ANT100         3705-001448         20369-001E           RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC501         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98	L609,L610	3301-002078	BLM15AX102SN1D
TAC603 3409-001191 SPVN110101 ANT100 3705-001448 20369-001E RFS100 3705-001731 KMS-560-002-BEF HDC702,HDC801 3711-006843 14-5802-044-002-829 HDC700 3711-007071 AXE622124AW1 HDC701 3711-007295 AXE634124AW1 HDC601,HDC703 3711-007332 AXE410124AW1 HEA300 3711-007467 AXE620124AW1 BTC500 3711-007629 KQ03SP-3R HDC600,HDC800 3711-007810 AXE616124AW1 HDC501 3711-008049 AXT420124AW1 HDC501 3711-008376 AXE440124AW1 ANT500,ANT501 3712-001373 HJ-BCT-02Y ANT102,ANT200,ANT201,ANT5 02,ANT503 HJ-BCT-02Y  ANT102,ANT200,ANT201,ANT5 02,ANT503 GH61-01680A SUS-T0-3G-TOP-1 SUS201,SUS203 GH61-02010A SUS-T0-3G-TOP-2 SUS202 GH61-02023A SHIELDCAN-T0-3G-R SC201 GH98-25121A SHIELDCAN-T0-3G-R UME300 1108-000472 KMVTU000LM-B503	L608	3301-002122	BLM15PX121SN1
ANT100 3705-001448 20369-001E  RFS100 3705-001731 KMS-560-002-BEF  HDC702,HDC801 3711-006843 14-5802-044-002-829  HDC700 3711-007071 AXE622124AW1  HDC701 3711-007295 AXE634124AW1  HDC601,HDC703 3711-007332 AXE410124AW1  HEA300 3711-007629 KQ03SP-3R  HDC600,HDC800 3711-007610 AXE6124AW1  HDC500 3711-007810 AXE616124AW1  HDC501 3711-00849 AXT420124AW1  HDC501 3711-008376 AXE440124AW1  ANT500,ANT501 3712-001373 HJ-BCT-02Y  ANT102,ANT200,ANT201,ANT5 02,ANT503 HJ-BCT-02Y  ANT102,ANT200,ANT201,ANT5 3712-001412 HJ-ICT-07Y  U224 4709-002157 SWB-B53  SUS200 GH61-01680A SUS-T0-3G-TOP-1  SUS201,SUS203 GH61-02010A SUS-T0-3G-TOP-2  SUS202 GH61-02023A SUS-T0-3G-TOP-3  SC200 GH98-24443A SHIELDCAN-T0-3G-R  UME300 1108-000472 KMVTU000LM-B503	TAC600,TAC601	3404-001303	LS12K2-T
RFS100         3705-001731         KMS-560-002-BEF           HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	TAC603	3409-001191	SPVN110101
HDC702,HDC801         3711-006843         14-5802-044-002-829           HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	ANT100	3705-001448	20369-001E
HDC700         3711-007071         AXE622124AW1           HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	RFS100	3705-001731	KMS-560-002-BEF
HDC701         3711-007295         AXE634124AW1           HDC601,HDC703         3711-007332         AXE410124AW1           HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           02,ANT503         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	HDC702,HDC801	3711-006843	14-5802-044-002-829
HDC601,HDC703 3711-007332 AXE410124AW1 HEA300 3711-007467 AXE620124AW1 BTC500 3711-007629 KQ03SP-3R HDC600,HDC800 3711-007810 AXE616124AW1 HDC500 3711-008049 AXT420124AW1 HDC501 3711-008376 AXE440124AW1 ANT500,ANT501 3712-001373 HJ-BCT-02Y ANT102,ANT200,ANT201,ANT5 02,ANT503 HJ-ICT-07Y U224 4709-002157 SWB-B53 SUS200 GH61-01680A SUS-T0-3G-TOP-1 SUS201,SUS203 GH61-02010A SUS-T0-3G-TOP-2 SUS202 GH61-02023A SUS-T0-3G-TOP-3 SC200 GH98-24443A SHIELDCAN-T0-3G-R UME300 1108-000472 KMVTU000LM-B503	HDC700	3711-007071	AXE622124AW1
HEA300         3711-007467         AXE620124AW1           BTC500         3711-007629         KQ03SP-3R           HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5 02,ANT503         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	HDC701	3711-007295	AXE634124AW1
BTC500 3711-007629 KQ03SP-3R HDC600,HDC800 3711-007810 AXE616124AW1 HDC500 3711-008049 AXT420124AW1 HDC501 3711-008376 AXE440124AW1 ANT500,ANT501 3712-001373 HJ-BCT-02Y ANT102,ANT200,ANT201,ANT5 02,ANT503 HJ-ICT-07Y U224 4709-002157 SWB-B53 SUS200 GH61-01680A SUS-T0-3G-TOP-1 SUS201,SUS203 GH61-02010A SUS-T0-3G-TOP-2 SUS202 GH61-02023A SUS-T0-3G-TOP-3 SC200 GH98-24443A SHIELDCAN-T0-3G-L SC201 GH98-25121A SHIELDCAN-T0-3G-R UME300 1108-000472 KMVTU000LM-B503	HDC601,HDC703	3711-007332	AXE410124AW1
HDC600,HDC800         3711-007810         AXE616124AW1           HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5 02,ANT503         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	HEA300	3711-007467	AXE620124AW1
HDC500         3711-008049         AXT420124AW1           HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	BTC500	3711-007629	KQ03SP-3R
HDC501         3711-008376         AXE440124AW1           ANT500,ANT501         3712-001373         HJ-BCT-02Y           ANT102,ANT200,ANT201,ANT5 02,ANT503         3712-001412         HJ-ICT-07Y           U224         4709-002157         SWB-B53           SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	HDC600,HDC800	3711-007810	AXE616124AW1
ANT500,ANT501 3712-001373 HJ-BCT-02Y  ANT102,ANT200,ANT201,ANT5 02,ANT503 HJ-ICT-07Y  U224 4709-002157 SWB-B53  SUS200 GH61-01680A SUS-T0-3G-TOP-1  SUS201,SUS203 GH61-02010A SUS-T0-3G-TOP-2  SUS202 GH61-02023A SUS-T0-3G-TOP-3  SC200 GH98-24443A SHIELDCAN-T0-3G-L  SC201 GH98-25121A SHIELDCAN-T0-3G-R  UME300 1108-000472 KMVTU000LM-B503	HDC500	3711-008049	AXT420124AW1
ANT102,ANT200,ANT201,ANT5 02,ANT503  U224  4709-002157  SWB-B53  SUS200  GH61-01680A  SUS-T0-3G-TOP-1  SUS201,SUS203  GH61-02010A  SUS-T0-3G-TOP-2  SUS202  GH61-02023A  SUS-T0-3G-TOP-3  SC200  GH98-24443A  SHIELDCAN-T0-3G-L  SC201  GH98-25121A  SHIELDCAN-T0-3G-R  UME300  1108-000472  KMVTU000LM-B503	HDC501	3711-008376	AXE440124AW1
02,ANT503       3712-001412       H3-ICT-071         U224       4709-002157       SWB-B53         SUS200       GH61-01680A       SUS-T0-3G-TOP-1         SUS201,SUS203       GH61-02010A       SUS-T0-3G-TOP-2         SUS202       GH61-02023A       SUS-T0-3G-TOP-3         SC200       GH98-24443A       SHIELDCAN-T0-3G-L         SC201       GH98-25121A       SHIELDCAN-T0-3G-R         UME300       1108-000472       KMVTU000LM-B503	ANT500,ANT501	3712-001373	HJ-BCT-02Y
SUS200         GH61-01680A         SUS-T0-3G-TOP-1           SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503		3712-001412	HJ-ICT-07Y
SUS201,SUS203         GH61-02010A         SUS-T0-3G-TOP-2           SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	U224	4709-002157	SWB-B53
SUS202         GH61-02023A         SUS-T0-3G-TOP-3           SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	SUS200	GH61-01680A	SUS-T0-3G-TOP-1
SC200         GH98-24443A         SHIELDCAN-T0-3G-L           SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	SUS201,SUS203	GH61-02010A	SUS-T0-3G-TOP-2
SC201         GH98-25121A         SHIELDCAN-T0-3G-R           UME300         1108-000472         KMVTU000LM-B503	SUS202	GH61-02023A	SUS-T0-3G-TOP-3
UME300 1108-000472 KMVTU000LM-B503	SC200	GH98-24443A	SHIELDCAN-T0-3G-L
	SC201	GH98-25121A	SHIELDCAN-T0-3G-R
NOD400	UME300	1108-000472	KMVTU000LM-B503
UCP400 0902-002966 SC54412BHB-A030	UCP400	0902-002966	SC54412BHB-A030

## 7. Level 2 Repair

#### 7.Disassembly and Asassembly Instructions

#### 7-1. Disassembly

1 2







- 1) Disasseble rear screw 11 point.
- 1) Disassemble rear with disassemble equipment, remocv hook Right  $\rightarrow$  Left  $\rightarrow$  Bottom  $\rightarrow$  Top
- 2) Remove hook which side of SIM socket.

3





- 1) Disassemble Rear frome Front.
- 2) Disassemble screw 1point on PBA..
- 1) Remove Digitizer, SUB PBA, 1.9M CAMERA, LCD FPCB, Earjack, Power key connector.
- 2) Remove coaxial cable.

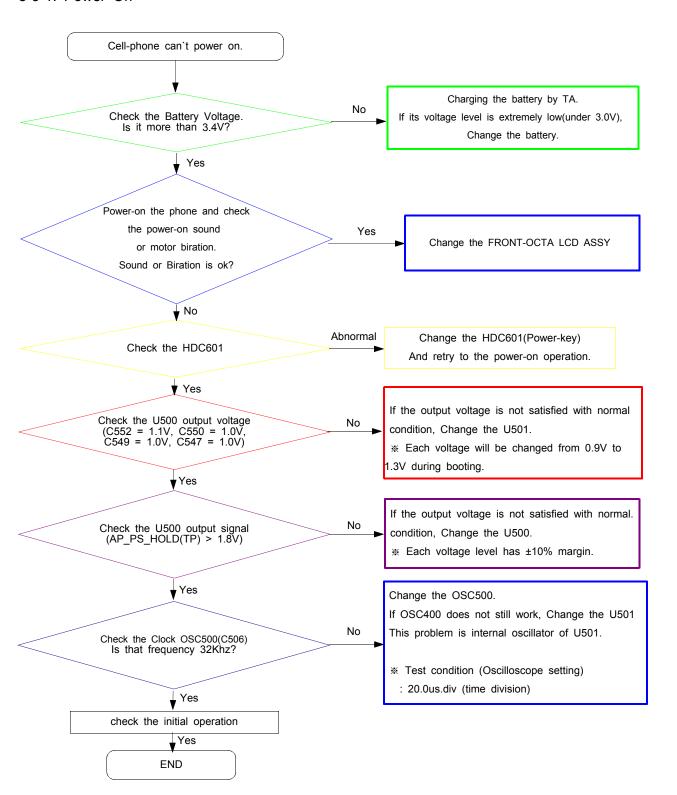
1) Disassemble Front from PBA.

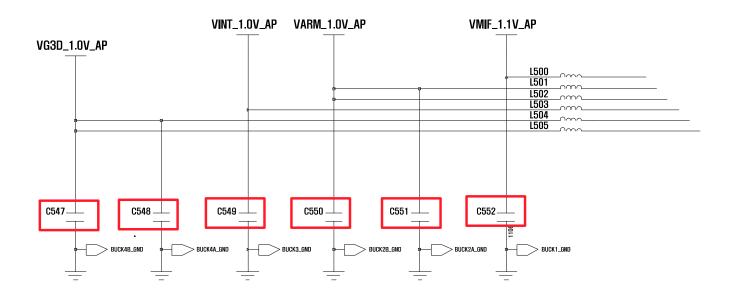
#### 7-2. Assembly

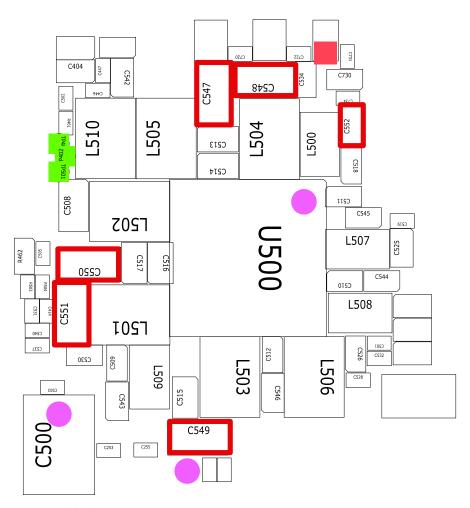
2 1) Assemble Digitizer, SUB PBA, 1.9M CAMERA, 1) Assemble Front with PBA. LCD FPCB, Earjack, Power key connector. 2) Assemble coaxial cable. 3 4 1) Assemble Front with Rear. 2) Assemble screw 1point on PBA.(Torque:1.0 ~ 2) Assemble screw 11Point on Rear.(Torque:1.0 1.2 Kgf · Cm ) ~ 1.2 Kgf · Cm )

## 8. Level 3 Repair

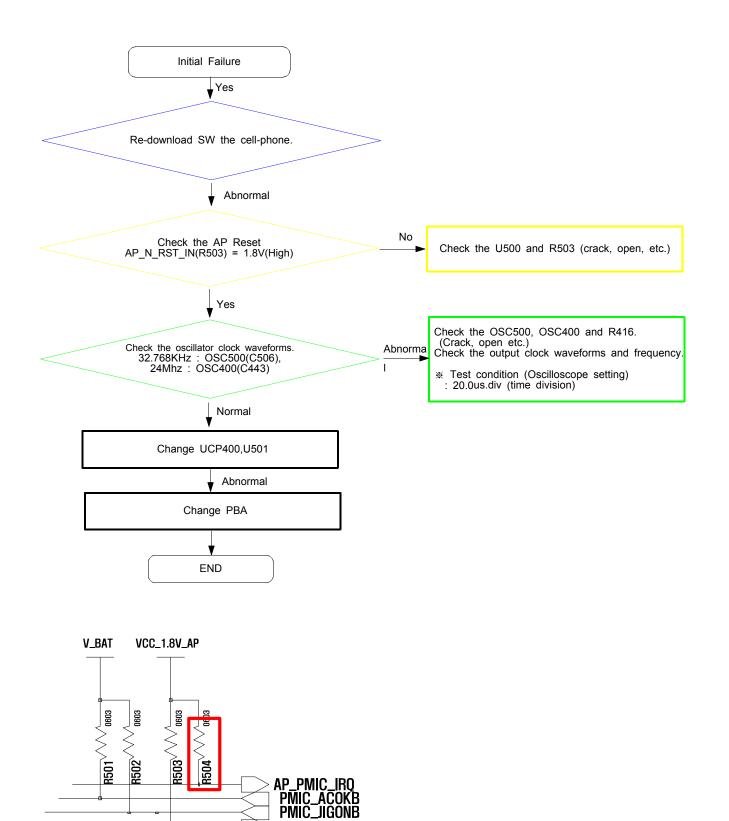
#### 8-3-1. Power On





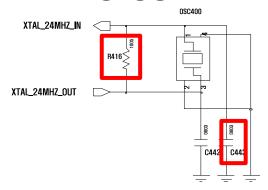


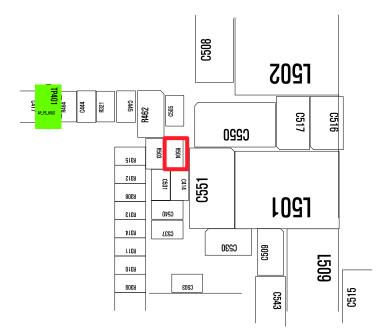
8-3-2. Initial

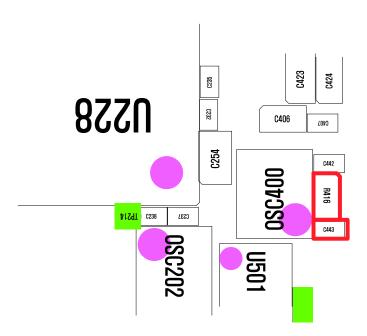


AP\_N\_RST\_IN

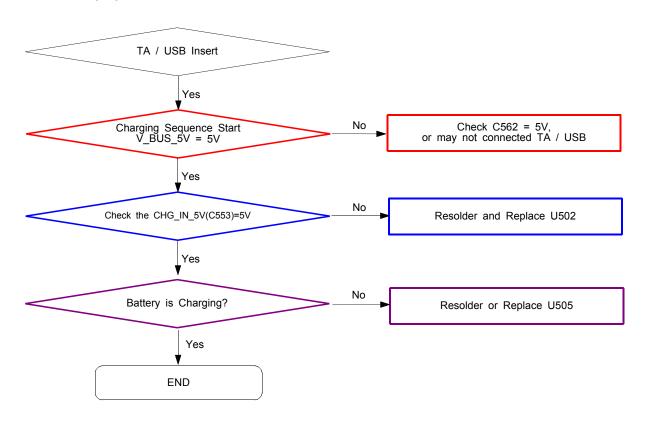
## AP CLOCK

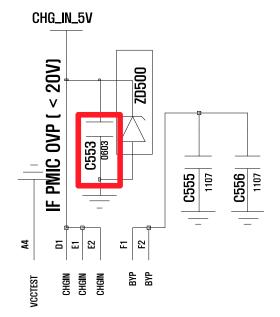


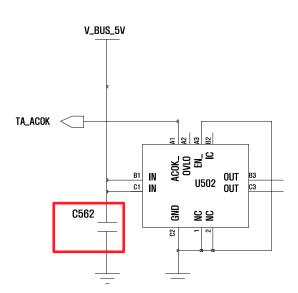


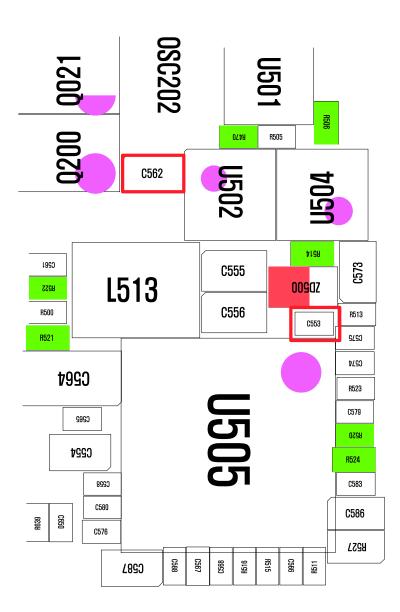


#### 8-3-5. Charging Part









#### 8-3-9. OTG

