



Internal Use Only

MOBILE PHONE SERVICE MANUAL

CAUTION

BEFORE SERVICING THE UNIT, READ THE "SAFETY PRECAUTIONS"
IN THIS MANUAL

MODEL : LG-F370L/S/K

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가. 제품의 특징점



1. 제품의 특징점

제1조 제품의 명칭

본 제품은 LTE 방식의 무선 접속 Algorithm을 적용한 내수 Smart Phone이다.

제2조 목적, 제품 개요

□ 목적

디지털 휴대폰 기능과 위치 정보 제공을 위한 GPS 기능을 내장하고, 4.5" qHD TFT LCD를 통해 Android K.K.을 지원하는 Smart phone으로 DOP type이다.
VGA 전면 Camera와 5M 후면 Camera 를 내장하고 있다. 통신 방식으로는 LTE를 지원하며, Roaming Band인 GSM, WCDMA를 지원한다. 근거리 무선통신방식으로 Bluetooth 4.0, IEEE 802.11 2.4G b/g/n, NFC를 지원하는 SKT / KT / LG U+향 내수 모델이다.

□ 제품개요

1. Phone Type : DOP type
2. Main Chipset : MSM8926,
Memory(8Gbits LPDDR2 SDRAM -POP, 8GB eMMC)
3. LCD : 4.5" qHD, 800x480 pixels, 16.7M Colors, TFT
4. Touch screen input : Capacitive
5. OS : Android 4.4 (킷캣 : K.K.)
6. Camera: Built-in Camera (5MP AF with flash, VGA CMOS Image sensor)
7. PMIC 적용: 전원 control, Flash Driver, Battery 보호 기능 등
8. Voice Recording/Memo/Playback, Voice Recognition System
9. Web Browser: Browser
10. 내장 8GB eMMC
11. Bluetooth 4.0 BLE 지원
12. WLAN 2.4GHz 802.11 b/g/n
13. NFC 지원
14. FM Radio 지원
15. Q-slide 기능 지원

제3조 적용범위

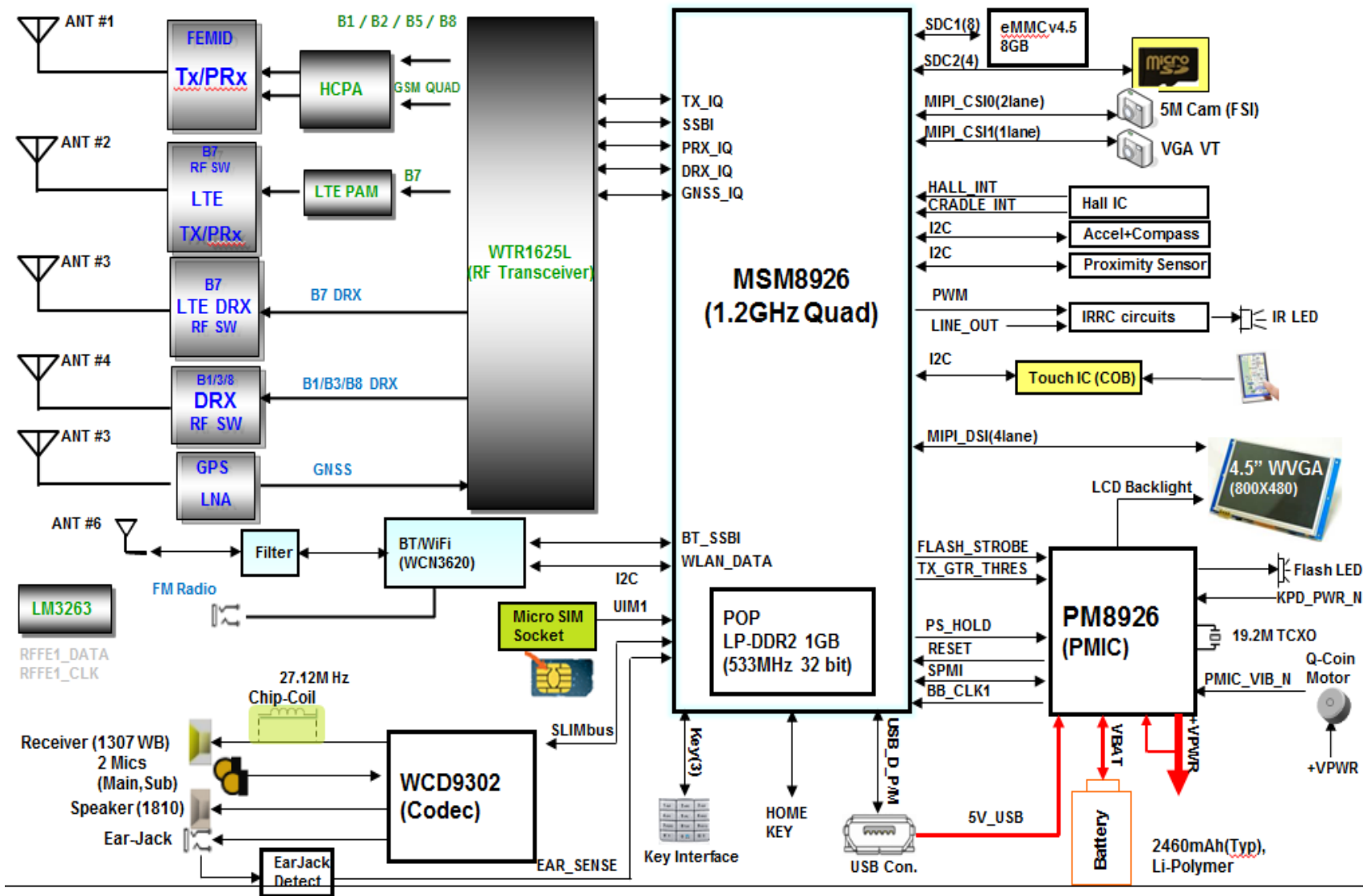
1. Phone : F370S (w2440mAh(typ.착탈형) battery)
2. Adapter (TA)
3. User Manual
4. USB cable
5. Stereo head set
6. Battery

제4조 용어의 정의

1. **MSM**: 멀티미디어 처리 및 Phone 전체 동작 제어를 위한 **Application Processor**
2. **Memory** : Protocol, User Interface등의 **Software**를 저장함.
3. **Alert부** : Call Paging, 사용자 오 동작 등의 지원을 위한 기능 수행함.
4. **LCD Display, Keypad부** : Handset의 동작 상태, 사용자 정보 등을 입력, 표시해 주기 위한 기능을 수행함.
5. **Micro USB port**: Battery 충전, Data 통신을 위한 외부접속 Port.
6. **Band Pass Filter (BPF)** : 일정 Band 내의 신호만을 통과시키고 나머지는 제거하는 Filter
7. **CAI(Common Air Interface)** : 호 처리, 핸드오프 등 단말기의 핵심 알고리즘
8. **Dual Tone Multi-Frequency(DTMF) Signaling** : Low Frequency와 High Frequency의 조합으로 동시에 전송되는 signal
9. **Frame Error Rate(FER)** : 총 수신 프레임 대 Error Frame의 비
10. **Low Noise Amplifier (LNA)** : 수신된 신호를 낮은 noise만을 add 시키고 원하는 신호를 증폭시키는 증폭기.
11. **Time & Control Processor(TCP)** : GPS수신기로부터 제공되는 신호를 이용하여 기지국내의 모든 프로세서에 Clock 제공
12. **Direction Conversion** : 수퍼 헤테로다인 방식의 반대되는 개념. 즉 IF(중간주파수)를 사용하지 않고 반송파(carrier)를 기저대역(baseband)로 곧바로 끌어내리고 올리는 방식.
13. **Voice Mail Service(VMS)** : 음성사서함 서비스. (전화를 통해 음성메시지를 저장 또는 전달하는 서비스)
14. **Code Division Multiple Access(CDMA)** : 부호분할 다중 접속방식
15. **BGA (Ball Grid Array)** : 반도체 실장기술에서 프린트배전기판의 뒷면에 리드대신 구형의 볼을 이용하는 실장형태의 한가지
16. **Vocoder** : 음성신호를 음원 및 공명계의 특성을 나타내는 몇 개의 파라미터로분해 코드화하는 디바이스
17. **Baseband** : 고주파 반송파를 down converting한 최종적 신호처리밴드, 즉 실제 정보를 담고 있는 음성,영상,데이터 등의 최종 원천신호주파수 영역을 말함.

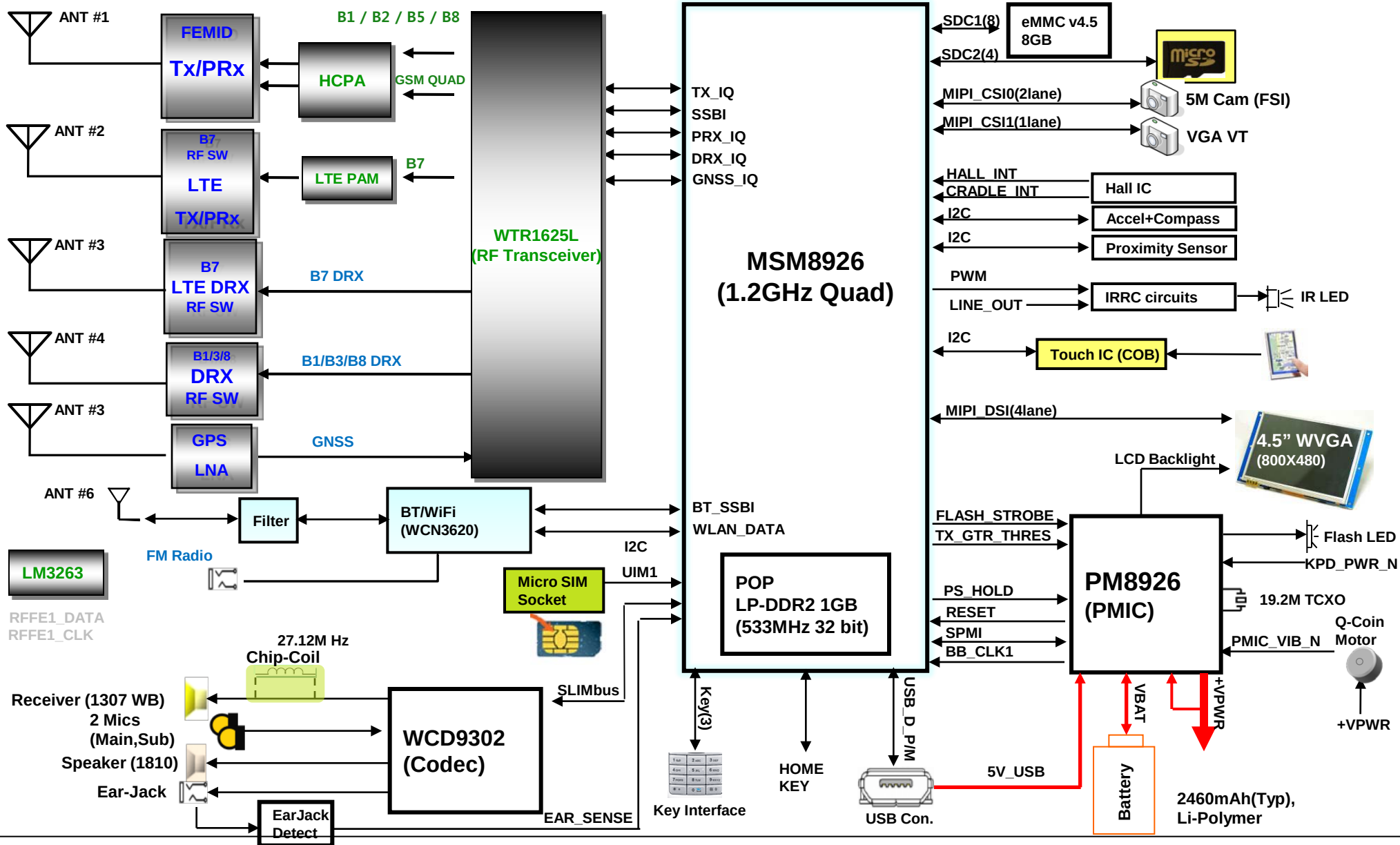
- 18. **Watchdog** : 예상치 못한 하드웨어나 소프트웨어의 비 정상적 동작 시 재 부팅시키는 역할
- 19. **CODEC** : 음성을 Digital화하는 Coder와 Digital신호를 음성으로 바꾸는 Decoder의 합성어
- 20. **PC Sync(PC synchronization)** : PC 와 Phone 의 자료를 교환하고 동기화 할 수 있는 기능
- 21. **AGC(Automatic Gain Control)** : 입력신호에 따라 회로의 이득을 조절하여 출력을 정하게 유지하는 회로
- 22. **SMS (Short Message Services)** : 비교적 짧은 길이 (80byte)의 데이터를 전송하는 서비스
- 23. **RSSI (Received Signal Strength Indicator)** : 수신 신호 전력 세기의 표시
- 24. **WLAN (Wireless Local Area Network)** : 오피스, 가정, 상가 등 옥내 또는 옥외 환경에서 무선으로 구축된 네트워크 환경. 일반적으로 30~150m 정도의 거리에서 무선으로 1~54Mbps의 데이터를 고속으로 전송 가능
- 25. **MMS (Multimedia Messaging System)** : 3세대 이동통신 서비스의 기본 요소로서 영상, 음악, 음성, 동영상 등 다양한 형식의 데이터를 주고받을 수 있는 메시징 시스템
- 26. **H.263** : H.261보다 낮은 데이터 전송 속도의 영상 회의나 텔레비전 전화 실현을 목적으로 하는 컬러 영상 신호의 디지털 부호화 기술을 규정한 ITU-T 권고
- 27. **LTE (Long Term Evolution)** :HSDPA(고속하향패킷접속)보다 12배 이상 빠른 고속 무선 데이터 패킷통신 규격(채널 대역폭은 1.25~20MHz이며, 20MHz 대역폭을 기준으로 하향링크의 최대 전송속도는 100Mbps, 상향링크의 최대 전송속도는 50Mbps)
- 28. **SIM (Subscribe Identity Module)** : 이동전화기에서 사용할 수 있는 카드 형태의 모듈로 가입자의 인증, 과금, 보안 기능 등 다양한 서비스를 제공할 수 있도록 개인 정보를 저장한 칩
- 29. **NFC(Near Field Communication)** : 비 접촉식 근거리 무선통신

1. F370L/S/K Block Diagram



2. 제품 구성 블록도

1. F370L/S/K Block Diagram



3. 제품의 기본구성

항목	Type/Spec	기능/구성 설명	제 조업체
1. 본체	DOP Type	Full Touch Screen Key지원	LG전자
2. Adapter (TA)	Input : AC100 ~ 240V,50-60Hz Output : DC 5V, 0.85A		SUNLIN
3. User Manual		사용자 Manual	LG전자
4. USB cable	Micro USB		KSD/닝보
5. Stereo Headset	3.5Φ, 4극, 1 key	Ear-Mic Stereo Headset	I-sound
6. Battery	Soft-pack (2440mAh(Typ) 3.8V,Li-Ion)	완충전압 : 4.35V	LG화학, 도카드

4. Option 구성

항목	Type/Spec	기능/구성 설명
1. Bluetooth Headset		
2. Bluetooth Hands-Free kit		
3. Micro SD Card Memory		
4. Smart Case	Hall IC detect	Cover Open 시 Display Turn on

제6조(기능 및 성능)

1. 제품 주요기능

- 1) **Battery Indicator** : 잔여 배터리 용량에 따라 레벨을 표시
- 2) **착신음 선택/소거 기능** : 착신 멜로디(착신음 선택 또는 진동 전환 등을 통한 멜로디제거)
- 3) **SMS기능** : 단문 메시지를 수신 및 발신
- 4) **RSSI Display** : 수신감도를 나타냄
- 5) **단축 Dialing** : 99 개의 단축 다이얼
- 6) **DATA통신기능** : LTE 망을 통한 인터넷접속
- 7) **Low Battery Alarm**
- 8) **진동기능**
- 9) **Menu선택기능**
- 10) **Last Number Redial** : 최근 통화한 번호를 메모리에서 지우지 않고 “통화” 버튼을 누르면 다시 다이얼링 가능
- 11) **Schedule Alarm기능** : 반복 이벤트 설정/Reminder기능
- 12) **Roaming표시**:가입된 서비스지역을 벗어나 타 서비스 지역임을 표시(WCDMA, GSM)
- 13) **계산기 기능**:기본적인 사칙연산 가능
- 14) **Mute 기능** : Screen상 Mute를 선택하여 통화 시 무음상태 유지/해제
- 15) **잠금 기능** : 전화 잠금,전 원을 켜 때 잠금, 잠금 번호 변경, 전화 잠금 상태에서 비상전화, 선택 가능
- 16) **자기번호/ SW/HW 버전 확인 기능** : 설정 메뉴에서 자신의 폰 번호 확인, **Software Version** 확인
- 17) **Lock Code 설정/변경** : **Lock Code** 또는 **Lock Pattern** 입력으로 전화 잠금 해제
- 18) **Volume조절기능** : 전화벨/키톤/통화 음량 등을 조절
- 19) **시계기능** : 현재 시간을 기지국으로부터 수신한 시점부터 상태유지
- 20) **Backlight (LCD)** :
 - ① 화면 꺼짐 시간 : 30초/1분/2분/5분/10분/15분 으로 설정가능
- 21) **전화 받기 기능** : 호 수신 시 통화 키를 누르면 통화가능
- 22) **Call Time Display기능** : 통화시간 표시
- 23) **Missed Call Alert 기능**
- 24) **착신 멜로디 Download 기능**:사용자가 전화벨 등의 멜로디를 **Down** 입력
- 25) **PIM Phone Book 기능**:전화번호부에 개수의 제한 없이 이름을 저장. 각 아이템마다 다수의 필드 저장. (휴대폰-휴대전화/직장/집/기본/기타, 그룹, 벨소리, 이벤트, 관계, 조직, 이메일, 메신저, 주소, 메모, 닉네임, 웹사이트 등)

- 26) Mobile-Sync : PC 혹은 phone에서 자료를 입력하고 download/upload 하는 기능
- 27) Caller ID Display : Call 수신 시 Display를 통하여 Picture Caller ID 사진, Camera를 통해 입력된 화면 Display 및 사진촬영, Current Time, Missed Call Information, Alarm의 내용, Phone status 등을 Display 함
- 28) CMX4.x MIDI Sound : 전화 착신 벨, 게임 Sounds를 지원하는 기능
- 29) MMS(Multimedia Messaging Service) : 사진,동영상포함 메일 등 지원 기능
- 30) Voice service : Voice Recognition System/ Voice Memo / Voice Recording
- 31) 전화번호 검색 시 알파벳 순으로 검색 기능
- 32) Internet Site bookmark 기능
- 33) Camcorder기능 : 동영상 저장/Play 기능 제공(1080p 30fps, 메모리잔량 동안 저장 가능)
- 34) 다양한 Multimedia contents(JPEG/PNG/QCELP/AAC/MPEG4) play 가능
- 35) SMS EMS 송/수신 기능:단문메시지를 편집하고 전송함
- 36) Inner charger : 배터리 충전회로 내장 및 충전 상태 표시 기능 제공
- 37) Provision service : 단말기 등록되기 전에 사업자가 제공 가능한 서비스를 사용자에게 보여주는 기능
- 38) 비행기모드 : 비행기 탑승 시 단말기에서 신호를 전파시키지 않도록 모드 지원
- 39) Bluetooth : Bluetooth 4.0 을 지원하며 지원되는 Profile은 headset/handsfree/file Transfer/
- 40) Dial-up/HID/A2DP/OPP/BIP/PBAP 을 지원 함
- 41) WLAN 기능 : IEEE 802.11 2.4G b/g/n Audio, Video streaming 서비스 등 인터넷 망을 통한 멀티미디어 서비스 됨. E-mail 기능 지원 / 인터넷 콘텐츠 이용 가능
- 42) LTE 기능 : 3GPP 36.101 지원
- 43) PDN을 통한 인터넷 망 접속으로 다양한 멀티미디어 서비스 가능
- 44) Netcast 지원 / Skype 이용 가능
- 45) 음성촬영(Voice Shutter) : 음성 명령에 의해서 촬영이 되는 기능
- 46) 타임머신 : 촬영 버튼을 누르기 전으로 돌아가, 놓치고 싶지 않은 장면을 확인하고 저장할 수 있는 기능
- 47)HDR : 다중 노출 기술로 역광에서 보정된 사진을 촬영할 수 있게 하는 기능
- 48)파노라마 : 연속적으로 찍은 사진을 하나의 파노라마 사진으로 만드는 기능
- 49)자동 얼굴 인식 : 자동으로 얼굴을 인식하여, 해당 얼굴에 초점을 맞춰 주는 기능
- 50)Live Snapshot : 동영상 레코딩 중에 특정 장면을 사진으로 촬영 할 수 있는 기능

나. 규격 및 SPEC



LG Electronics



제7조(전기적 특성)

1. System 개요

항 목	Type / Spec.
1. Phone Type	DOP
2. 크기	127.5 x 66.1 x 9.95 (mm)
3. 무게	약 130g (배터리 포함)
4. 적용 배터리	2,440 mAh (Typ), Li-ion
5. MSM Chipset	MSM8926, WTR1625L, PM8926, WCD9302
6. Memory	1GB (SDRAM DDR2) + 8GB eMMC
7. LCD	4.5", 800x480 Pixels, 16.7M Colors, TFT
8. Main Camera	5M AF + VGA VT
9. Audio	Ø18x10X3 Spring Type Speaker
10. Bluetooth	Bluetooth 4.0
11. WLAN	2.4GHz IEEE 802.11 b/g/n
12. LTE	3GPP 36.101

2. 사용 조건

항 목	Specification	단 위
사용 전압	3.8(Typ), 4.35 (Max)	V
동작 온도	-20 ~ +60	℃
저장 온도	-30 ~ +60	℃
동작 습도	0~95	%

3. 무선 특성

1) LTE 송신부 전기적 특성

항목	Spec.	Min	Typ.	Max	단위
Maximum Output Power (Class III)	Power class 3 (Environmental Test)	20.3 (20.3)	23.0 (23.0)	25.7 (25.7)	dBm/ 10Mhz
Frequency Error	QPSK	-0.1PPM -15hz	-	-0.1PPM -15hz	
EVM	QPSK 16QAM			17.5 12.5	%
IQ-component	QPSK.12RB			-24.2	dBc
In-band emissions for non allocated RB	QPSK, 12RB				dB
Spectrum Flatness	QPSK, 50RB			+5.4	dB
Occupied bandwidth	QPSK, 50RB			10	MHz
ACLR (Adjacent Channel Leakage Power Ratio)	E-UTRA ACLR1			-29.2	dB
	UTRA ACLR1			-32.2	dB
	UTRA ACLR2			-35.2	dB
Transmitter Spurious emissions	9 kHz < f < 150 kHz			-36	dBm/ 1kHz
	150kHz < f < 30 MHz			-36	dBm/ 10kHz
	30MHz < f < 1GHz			-36	dBm/ 100kHz
	1GHz < f < 12.75GHz			-30	dBm/ 1MHz

※ 기타 항목은 3GPP TS 36.521-1 에 준함.

- 주파수 범위 : LTE Band1 (송신 1920~1980MHz) , LTE Band3 (송신 1710~1785MHz)
LTE Band5 (송신 824~849MHz), LTE Band7 (송신 2500 ~ 2570MHz)
- 중간 주파수 : 없음
- 정격 최대 출력 : 223.87mW (23.5dBm)

※ Carrier Aggregation

; PCC 로 동작하는 LTE Band 의 송신부만 동작하며, 전기적 특성은 Non-CA 동작과 동일함

2) LTE 수신부 전기적 특성

항 목	Spec.	Min	Typ.	Max	단 위
Sensitivity Level (DL : QPSK, 50RB UL : QPSK, 25RB)	Dual Receiver			SENS	dBm /10MHz
	Single Receiver (exception in 3GPP)			SENS+3	dBm /10MHz
Maximum input Level	Dual Receiver (DL : 64QAM, 50RB UL : QPSK, 12RB)			-25.7	dBm /10MHz
ACS (Adjacent Channel Selectivity)	Dual Receiver (DL : QPSK, 50RB UL : QPSK, 12RB) $\Delta f = \pm 7.5\text{MHz}$, LTE BW 10MHz			33	dB
In-Band Blocking (DL : QPSK, 50RB UL : QPSK, 20RB)	Dual Receiver $\Delta f = \pm 7.5\text{MHz}$, LTE BW 10MHz $\Delta f = \pm 12.5\text{MHz}$, LTE BW 10MHz			SENS+6	dBm /10MHz
Out of Band Blocking (DL : QPSK, 50RB UL : QPSK, 20RB)	Dual Receiver $\Delta f = \pm 15\text{MHz} \sim 85\text{MHz}$, CW			SENS+6	dBm /10MHz
Narrow Band Blocking (DL : QPSK, 50RB UL : QPSK, 20RB)	Dual Receiver $\Delta f = \pm 5.2125\text{MHz}$, CW			SENS+13	dBm /10MHz
Intermodulation (DL : QPSK, 50RB UL : QPSK, 20RB)	Dual Receiver $\Delta f = \pm 10\text{MHz}$, LTE BW 10MHz			SENS+6	dBm /10MHz
Spurious emissions (DL : QPSK, 0RB UL : QPSK, 0RB)	Dual Receiver $30\text{MHz} < f < 1\text{GHz}$			-57	dBm /100kHz
	$1\text{GHz} < f < 12.75\text{GHz}$			-47	dBm /1MHz

※ 기타 항목은 3GPP TS 36.521-1 에 준함.

-SENS

B1 : -96.3 (DL : QPSK, 50RB UL : QPSK, 50RB)

B3 : -93.3 (DL : QPSK, 50RB UL : QPSK, 50RB)

B5 : -94.3 (DL : QPSK, 50RB UL : QPSK, 25RB)

B7 : -94.3 (DL : QPSK, 50RB UL : QPSK, 50RB)

2) LTE 수신부 전기적 특성

• Carrier Aggregation ; LTE Band5 (PCC) + LTE Band1 (SCC)

항 목	Spec.	Min	Typ	Max	단 위
PCC (LTE Band5) Sensitivity Level - DL : QPSK, 50RB - UL : QPSK, 25RB	Dual Receiver			-94.3	dBm /10MHz
	Single Receiver (exception in 3GPP)			-91.3	dBm /10MHz
SCC (LTE Band1) Sensitivity Level - DL : QPSK, 50RB - UL : None	Dual Receiver			-96.3	dBm /10MHz
	Single Receiver (exception in 3GPP)			-93.3	dBm /10MHz

• Carrier Aggregation ; LTE Band1 (PCC) + LTE Band5 (SCC)

항 목	Spec.	Min	Typ	Max	단 위
PCC (LTE Band1) Sensitivity Level - DL : QPSK, 50RB - UL : QPSK, 50RB	Dual Receiver			-96.3	dBm /10MHz
	Single Receiver (exception in 3GPP)			-93.3	dBm /10MHz
SCC (LTE Band5) Sensitivity Level - DL : QPSK, 50RB - UL : None	Dual Receiver			-94.3	dBm /10MHz
	Single Receiver (exception in 3GPP)			-91.3	dBm /10MHz

※ 기타 항목은 3GPP TS 36.521-1 에 준함.

3) WCDMA 송신부의 전기적 특성.

항 목	Spec.	Min	Typ.	Max	단 위
Maximum Output Power	Power class III	21.0	24	25.0	dBm/3.84MHz
Frequency Accuracy	-	-200	-	+200	Hz
Minimum Output Power	-	-	-	-50	dBm/3.84MHz
Occupied Bandwidth	-	-	-	4.6	MHz
Adjacent Channel Leakage Power Ratio	$\Delta f = \pm 5\text{MHz}$	-	-	-33	dBm/3.84MHz
	$\Delta f = \pm 10\text{MHz}$	-	-	-43	dBm/3.84MHz
Error Vector Magnitude (EVM)	-	-	-	17	%
Peak Code Domain Error	-	-	-	15	dBm/3.84MHz
Open Loop Output Power	Ior = -06.7dBm/3.84MHz	-46.7	-	-28.7	dBm/3.84MHz
	Ior = -65.7dBm/3.84MHz	-23.0	-	-5.0	dBm/3.84MHz
	Ior = -25.0dBm/3.84MHz	-0.0	-	14.0	dBm/3.84MHz
Transmit Off Power	-	-	-	-56	dBm/3.84MHz
Spectrum Emission Mask	$\Delta f = 2.5\sim 3.5\text{MHz}$	$-35-15 * (\Delta f-2.5)$			dBc/30KHz
	$\Delta f = 3.5\sim 7.5\text{MHz}$	$-35-1 * (\Delta f-3.5)$			dBc/1MHz
	$\Delta f = 7.5\sim 8.5\text{MHz}$	$-39-10 * (\Delta f-7.5)$			dBc/1MHz
	$\Delta f = 8.5\sim 12.5\text{MHz}$	-49			dBc/1MHz
Transmit Spurious Emission	9kHz ~ 150kHz			-36	dBm
	150kHz ~ 30MHz			-36	dBm
	30MHz ~ 1GHz			-36	dBm
	1GHz ~ 12.5GHz			-30	dBm

4) WCDMA 수신부의 전기적 특성.

항 목	Spec.	Min	Typ.	Max	단 위
Reference Sensitivity Level	BER < 0.001%	-	-	-106.7	dBm/3.84MHz
Maximum Input Level	Pin = -25dBm	-	-	0.1	BER(%)
Adjacent Channel Selectivity(ACS)	Jammer(Modulation) = -52dBm/3.84MHz $\Delta f = \pm 5\text{MHz}$ BER < 0.001%	-	-	-103	dBm/3.84MHz
In Band Blocking	Jammer(Modulation) = -56dBm/3.84MHz $\Delta f = \pm 10\text{MHz}$ BER < 0.001%	-	-	-103.7	dBm/3.84MHz
	Jammer(Modulation) = -44dBm/3.84MHz $\Delta f = \pm 15\text{MHz}$ BER < 0.001%	-	-	-103.7	dBm/3.84MHz
Inter-modulation Desensitization	Jammer1(CW)= -46dBm Jammer2(Modulation) = -46dBm/3.84MHz $\Delta f = \pm 10\text{MHz}$ BER < 0.001%	-	-	-103.7	dBm/3.84MHz
	Jammer1= -46dBm(CW) Jammer2(Modulation) = -46dBm/3.84MHz $\Delta f = \pm 20\text{MHz}$ BER < 0.001%	-	-	-103.7	dBm/3.84MHz
Spurious Emissions	30kHz ~ 1GHz	-	-	-57	dBm/30kHz
	1GHz ~ 1.92GHz	-	-	-47	dBm/1MHz
	1.92GHz ~ 1.98GHz	-	-	-60	dBm/3.84MHz
	1.98GHz ~ 2.11GHz	-	-	-47	dBm/3.84MHz
	2.11GHz ~ 2.17GHz	-	-	-60	dBm/3.84MHz
	2.17GHz ~ 12.75GHz	-	-	-47	dBm/1MHz

- 주파수 범위 : WCDMA1(1922.8~1977.2MHz/2112.8~2167.2MHz), WCDMA2(1852.4~1907.6MHz/1932.4~1987.6MHz)
WCDMA5(826.5~846.7MHz/871.4~891.6)

-중간 주파수 : 없음

-정격 최대 출력 :

B1 : 251.9mW (24dBm), B2/B5 : 199.5mW (23dBm)

5) GSM 송수신부의 전기적 특성.

항 목	Spec.
Phase Error	Rms : 5° Peak : 20 °
Frequency Error	GSM : 0.1 ppm DCS/PCS : 0.1 ppm
EMC(Radiated Spurious Emission Disturbance)	GSM/DCS : < -28dBm
Transmitter Output power and Burst Timing	GSM : 5dBm – 33dBm ± 3dB DCS/PCS : LvL:0 – 30dBm ± 3dB
Burst Timing	<3.69us
Spectrum due to modulation out to less than 1800kHz offset	200kHz : -36dBm 600kHz : -51dBm/-56dBm
Spectrum due to modulation out to larger than 1800kHz offset to the edge of the transmit band	GSM : 1800-3000kHz : < -63dBc(-46dBm) 3000kHz-6000kHz : < -65dBc(-46dBm) 6000kHz < : < -71dBc(-46dBm) DCS : 1800-3000kHz : < -65dBc(-51dBm) 6000kHz < : < -73dBc(-51dBm)
Spectrum due to switching transient	400kHz : -19dBm/-22dBm(5/0), -23dBm 600kHz : -21dBm/-24dBm(5/0), -26dBm
Reference Sensitivity – TCH/FS	Class II(RBER) : -105dBm(2.439%)
Usable receiver input level range	0.012(-15 - -40dBm)
Intermodulation rejection – Speech channels	± 800kHz, ± 1600kHz : -98dBm/-96dBm (2.439%)
AM Suppression -GSM : -31dBm - DCS : -29dBm	-98dBm/-96dBm (2.439%)
Timing Advance	± 0.5T

- 주파수 범위 : GSM850 (824.2~848.8MHz/869.2~893.8MHz), GSM900 (880~915MHz/925~960MHz)
DCS (1710~1785MHz/1805~1880MHz), PCS (1850~1910MHz/1830~1990MHz)
- 국부발진 주파수 범위 : 1688 ~ 1736 MHz
- 중간 주파수 : 없음
- 정격 최대 출력 : GSM 850 /900 : 1995.3mW(33dBm), DCS / PCS: 891.3 mW (29.5dBm)

6) HSDPA 송수신부의 전기적 특성.

	항 목	Spec.		Min	Typ.	Max	단 위
송 신	5.2.A Maximum Output Power with HS-DPCCH	$1/15 \leq \beta c/\beta d \leq 12/15$ $13/15 \leq \beta c/\beta d \leq 15/8$ $15/7 \leq \beta c/\beta d \leq 15/0$		21 20 19	23 22.5 22	25 25 25	dBm/3.84MHz
	5.7A HS-DPCCH	MAX / 0dBm	Step 0	0 dBm +/- 1 dB			dB
			Step 1 – Step 0	6 dB +/- 2.3 dB			dB
			Step 2 – Step 3	1 dB +/- 0.6 dB			dB
			Step 5 – Step 4	0 dB +/- 0.6 dB			dB
			Step 6 – Step 7	5 dB +/- 2.3 dB			dB
	5.9A Spectrum Emission Mask with HS-DPCCH	$\Delta f = 2.5 \sim 3.5\text{MHz}$		$-35-15 * (\Delta f-2.5)$			dBc/30KHz
		$\Delta f = 3.5 \sim 7.5\text{MHz}$		$-35-1 * (\Delta f-3.5)$			dBc/1MHz
		$\Delta f = 7.5 \sim 8.5\text{MHz}$		$-39\ 10 * (\Delta f-7.5)$			dBc/1MHz
		$\Delta f = 8.5 \sim 12.5\text{MHz}$		-49			dBc/1MHz
	5.10A Adjacent Channel Leakage Power Ratio with HS-DPCCH	$\Delta f = \pm 5\text{MHz}$		-	-	-33	dBm/3.84MHz
		$\Delta f = \pm 10\text{MHz}$		-	-	-43	dBm/3.84MHz
	5.13.1A Error Vector Magnitude (EVM) with HS-DPCCH	MAX Power -20 dBm		-	-	17.5	%
수 신	6.3A Maximum Input Level for HS-PDSCH Reception	Pin = -25dBm		-	-	10	BLER(%)

7) GPS 전기적 특성

항 목	Spec.
Sensitivity Test	각도 당 5회, Single Point Sensitivity ≤ -154 dBm

※ 기타 항목은 IS-916에 준함

8) Bluetooth 수신부 전기적 특성

항 목	Spec.		Min	Typ.	Max	단 위
Sensitivity (Single Slot Packet)	DH1 PRBS9	BER @ 0.1%		-	-70	dBm
Sensitivity (Multi Slot Packet)	DH5 PRBS9	BER @ 0.1%		-	-70	dBm
C/I Performance	DH1 PRBS9	Co-Channel -60dBm@ BER0.1%		-	11	dB
		C/I @1MHz -60dBm@ BER 0.1%		-	0	
		C/I @2MHz -60dBm@ BER 0.1%		-	-30	
		C/I @≥3MHz -67dBm@ BER0.1%		-	-40	
		C/I @Image -67dBm@ BER 0.1%		-	-9	
		C/I @1MHz Image -67dBm@ BER 0.1%		-	-20	
Blocking Performance	DH1 PRBS9	-10dBm @ 30M ~2 GHz		-	-67	dBm
		-27dBm @ 2 ~ 2.4 GHz				
		-27dBm @ 2.5 ~ 3 GHz				
		-10dBm @ 3 ~ 12.75 GHz				
Intermodulation Performance	DH1 PRBS9	Δf = +5MHz (CW) Δf = +10MHz (BT) BER @ 0.1%		-	-64	dBm
		Δf = -5MHz (CW) Δf = -10MHz (BT) BER @ 0.1%		-	-64	dBm
Maximum Input Level	DH1 PRBS9	BER @ 0.1%	-20	-		dBm

9) Bluetooth 송신부 전기적 특성(Continued)

항 목	Spec.		Min	Typ.	Max	단 위
Output Power	DH5 PRBS9	Nominal Pwr	-6	-	+20	dBm
		Peak Pwr	-	-	+23	dBm
Power Density	DH5 PRBS9	@100kHz BW		-	+20	dBm
Frequency Range	DH5 PRBS9	-30dBm @100kHz BW	2400	-	2483	MHz
Tx Output Spectrum (20dB BW)	DH5 PRBS9	$\Delta f = f_H - f_L$		-	1	MHz
Tx Output Spectrum (Adjacent Output Power)	DH5 PRBS9	@M-N = 2		-	-20	dBm
		@M-N >= 3		-	-40	dBm
Modulation Index	DH5 11110000	$f_{1_{AVG}}$	140	-	175	kHz
	DH5 10101010	$f_{2_{MAX}}$	115	-		kHz
		$f_{2_{AVG}}/f_{1_{AVG}}$	0.8	-		
Initial Carrier Freq. Tolerance	DH5 PRBS9		-75	-	+75	kHz
Carrier Frequency Drift	DH1 10101010	Freq. Drift	-25	-	+25	kHz
		Drift Rate	-20	-	+20	kHz/50us
	DH3 10101010	Freq. Drift	-40	-	+40	kHz
		Drift Rate	-20	-	+20	kHz/50us
	DH5 10101010	Freq. Drift	-40	-	+40	kHz
		Drift Rate	-20	-	+20	kHz/50us
Out of Band Spurious Emission	DH1 PRBS9	@ 30MHz ~ 12.75GHz	20			dBc

★ 음영으로 표시된 항목은 현재 측정할 수 없는 항목임

10) WLAN 802.11b 송수신부의 전기적 특성(Conducted)

항목	Spec.
Transmit Frequency	2400 MHz ~ 2483.5 MHz (CH1~CH13)
Tx Power Level	$\leq 20\text{dBm}$ under (Europe), $\leq 30\text{dBm}$ under (USA)
Frequency Tolerance	within ± 25 PPM
Chip clock Frequency Tolerance	within ± 25 PPM
Spectrum Mask	≤ -30 @ $f_c - 22\text{MHz} < f < f_c - 11\text{MHz}$ and $f_c + 11\text{MHz} < f < f_c + 22\text{MHz}$ ≤ -50 @ $f < f_c - 22\text{MHz}$ and $f > f_c + 22\text{MHz}$
Power ramp on/off time	$\leq 2\mu\text{s}$
Carrier Suppression	$\leq -15\text{dB}$
Modulation Accuracy (Peak EVM)	$\leq 35\%$
Spurious Emissions	$< -36\text{ dBm}$ @ 30MHz ~ 1GHz $< -30\text{ dBm}$ above @ 1GHz ~ 12.75GHz $< -47\text{ dBm}$ @ 1.8GHz ~ 1.9GHz $< -47\text{ dBm}$ @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	$\leq -76\text{dBm}$ (1Mbps,2Mbps,5.5Mbps,11Mbps) @ FER $\leq 8\%$
Rx Max input Sensitivity	$\geq -10\text{dBm}$ (1Mbps,2Mbps,5.5Mbps,11Mbps) @ FER $\leq 8\%$
Rx Adjacent Channel Rejection	$\geq 35\text{dB}$ @ FER $\leq 8\%$, interference input signal -70dBm @ $f_c \pm 25\text{MHz}$ (11Mbps)

11) WLAN 802.11g 송수신부의 전기적 특성(Conducted)

항목	Spec.
Transmit Frequency	2400 MHz ~ 2483.5 MHz (CH1~CH13)
Tx Power Level	≤ 20dBm under (Europe), ≤ 30dBm under (USA)
Frequency Tolerance	within ±25 PPM
Chip clock Frequency Tolerance	within ±25 PPM
Spectrum Mask	≤ -20 @ ±11MHz offset (9Mhz ~ 11MHz) ≤ -28 @ ±20MHz offset (11MHz ~ 20Mhz) ≤ -40 @ ±30MHz offset (20MHz ~ 30Mhz)
Transmitter constellation error (rms EVM)	≤ -5dB@6Mbps, ≤ -8dB@9Mbps, ≤ -10dB@12Mbps, ≤ -13dB@18Mbps, ≤ -16dB@24Mbps, ≤ -19dB@36Mbps, ≤ -22dB@48Mbps, ≤ -25dB@54Mbps
Spurious Emissions	< -36 dBm @ 30MHz ~ 1GHz < -30 dBm above @ 1GHz ~ 12.75GHz < -47 dBm @ 1.8GHz ~ 1.9GHz < -47 dBm @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	PER ≤ 10% -82dBm@6Mbps, -81dBm@9Mbps, -79dBm@12Mbps -77dBm@18Mbps, -74dBm@24Mbps, -70dBm@36Mbps -66dBm@48Mbps, -65dBm@54Mbps
Rx Max input Sensitivity	≥ -20dBm(6,9,12,18,24,36,48,54Mbps) @ PER ≤ 10%
Rx Adjacent Channel Rejection	PER ≤ 10%, ACR ≥ 16dB@6Mbps, ACR ≥ 15dB@9Mbps, ACR ≥ 13dB@12Mbps, ACR ≥ 11dB@18Mbps, ACR ≥ 8dB@24Mbps, ACR ≥ 4dB@36Mbps ACR ≥ 0dB@48Mbps, ACR ≥ -1dB@54Mbps ※ACR shall be measured by setting the desired signal's strength 3 dB above the rate-dependent sensitivity specified in min input sensitivity

12) WLAN 802.11n(HT20) 송수신부의 전기적 특성(Conducted)

항목	Spec.
Transmit Frequency	2400 ~ 2483.5 MHz (CH1 ~ 13)
Tx Power Level	≤ 10mW/MHz(CH1 ~ 13)
Frequency Tolerance	within ±25 PPM(2400 ~ 2483.5 MHz)
Chip clock Frequency Tolerance	within ±25 PPM(2400 ~ 2483.5 MHz)
Spectrum Mask	≤ -20 @ ±11MHz offset (9Mhz ~ 11MHz) ≤ -28 @ ±20MHz offset (11MHz ~ 20Mhz) ≤ -45 @ ±30MHz offset (20MHz ~ 30Mhz)
Transmitter constellation error (rms EVM)	≤ -5dB@6.5Mbps, ≤ -10dB@13Mbps, ≤ -13dB@19.5Mbps, ≤ -16dB@26Mbps, ≤ -19dB@39Mbps, ≤ -22dB@52Mbps, ≤ -25dB@58.5Mbps, ≤ -28dB@65Mbps
Spurious Emissions	[2400 MHz ~ 2483.5 MHz (CH1 ~ 13)] < -36 dBm @ 30MHz ~ 1GHz < -30 dBm above @ 1GHz ~ 12.75GHz < -47 dBm @ 1.8GHz ~ 1.9GHz < -47 dBm @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	PER ≤ 10% -82dBm@6.5Mbps, -79dBm@13Mbps, -77dBm@19.5Mbps -74dBm@26Mbps, -70dBm@39Mbps, -66dBm@52Mbps -65dBm@58.5Mbps, -64dBm@65Mbps
Rx Max input Sensitivity	≥ -20dBm @ PER ≤ 10%(2400 ~ 2483.5 MHz)
Rx Adjacent Channel Rejection	PER ≤ 10%, ACR ≥ 16dB@6.5Mbps, ACR ≥ 13dB@13Mbps, ACR ≥ 11dB@19.5Mbps, ACR ≥ 8dB@26Mbps, ACR ≥ 4dB@39Mbps, ACR ≥ 0dB@52Mbps ACR ≥ -1dB@58.5Mbps, ACR ≥ -2dB@65Mbps ※ACR shall be measured by setting the desired signal's strength 3 dB above the rate-dependent sensitivity specified in min input sensitivity

제8조 부가기능

1. 소모전류

◆ RF 소모 전류 측정 시 Network Mode는 각 Band Only, Backlight Off

항 목	Specification		
	VOLTE	WCDMA	GSM
1. Sleep Mode	6mA 이하	6mA 이하	6mA 이하
2. Sleep : Ear jack 연결 시	6.5mA 이하	6.5mA 이하	6.5mA 이하
3. 대기전류(Sleep & Idle 평균)	7mA 이하 @ 2.56s	7mA 이하 @ DRX 7	7mA 이하 @ P.P 5
4. BT Connected 대기	10mA 이하(대기전류 대비 3mA 이하)	10mA 이하(대기전류 대비 3mA 이하)	10mA 이하(대기전류 대비 3mA 이하)
5. Talk Mode	-Max Pwr시 850mA이하 @ Avg -Tx 10dBm 300mA 이하 @ Avg	-Max Pwr 시 650mA이하 @ Avg - Tx 10dBm 250 mA이하 @ Avg	GSM LVL 5 350 mA이하 @ Avg
6. No SVC Mode	200mA 이하	200mA 이하	200mA 이하
7. Flight mode	6mA이하	6mA이하	6mA이하
8. Power Off Mode	500uA 이하	500uA 이하	500 uA 이하
9. LTE	Standby Mode (SCI1, LTE 2.56s Average Current)		7 mA 이하
	LTE Cat2 @ Tx 10dBm (Display OFF)		300 mA 이하

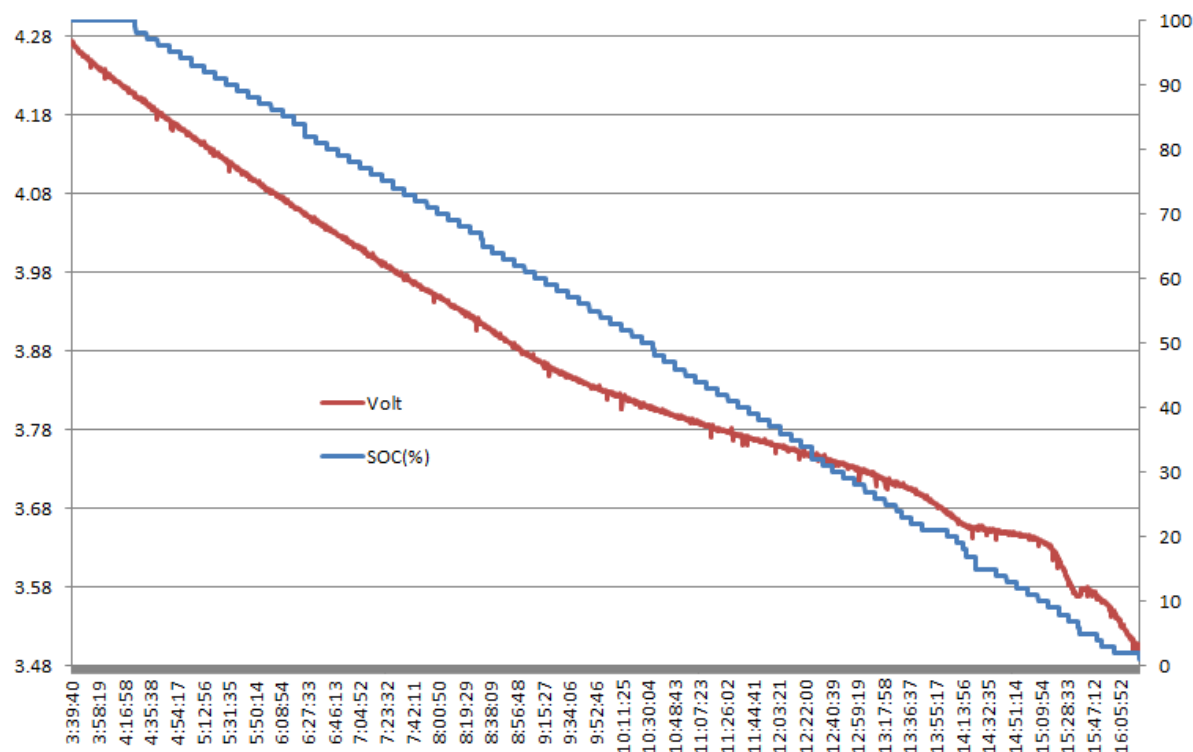
2. RSSI

-Network Mode는 각 Band Only상태에서 측정함.
-RF 소모 전류 측정 시 Display Off 상태에서 측정함.

bar	Specification			단위
	LTE (B1/B3/B5/B7)	WCDMA (B1/B2/B5)	GSM (850/EGSM/DCS /PCS)	
5→4	-107~-113	-93~-101	-87~-93	Antenna BAR
4→3	-111~-117	-97~-105	-91~-97	
3→2	-115~-121	-101~-109	-95~-101	
2→1	-119~-125	-104~-112	-99~-105	
1→0	-122~-128	-106~-114	-103~-109	
0→No SVC	-125이하	-110이하	-110이하	

- ◆ RSSI 측정 시 Power 변동 후 10초 이상의 공백 후 측정해야 함.(RSSI의 Stability를 확보하기 위한 시간임)
- ◆ WCDMA의 경우, Uplink Parameters→Maximum Uplink Transmit Power Level을 24dBm으로 설정 후 측정.

3. Battery Bar 방전 표시



Battery Bar	Specification	Battery Bar	Specification
Bar 20(Full)	98%이상	Bar 9 -> Bar 8	43% -> 42%
Bar 20 -> Bar 19	98% -> 97%	Bar 8 -> Bar 7	38% -> 37%
Bar 19 -> Bar 18	93% -> 92%	Bar 7 -> Bar 6	33% -> 32%
Bar 18 -> Bar 17	88% -> 87%	Bar 6 -> Bar 5	28% -> 27%
Bar 17 -> Bar 16	83% -> 82%	Bar 5 -> Bar 4	23% -> 22%
Bar 16 -> Bar 15	78% -> 77%	Bar 4 -> Bar 3	16% -> 15%
Bar 15 -> Bar 14	73% -> 72%	Bar 3 -> Bar 2	13% -> 12%
Bar 14 -> Bar 13	68% -> 67%	Bar 2 -> Bar 1	8% -> 7%
Bar 13 -> Bar 12	63% -> 62%	Bar 1 -> Bar 0	3% -> 2%
Bar 12 -> Bar 11	58% -> 57%	Power off	2% -> 1%
Bar 11 -> Bar 10	53% -> 52%	Low battery pop-up	15% , 5%, 1%
Bar 10 -> Bar 9	48% -> 47%		

4. Battery 표준 사용 시간

구분	Specification	측정 조건
대기 시간 (LTE)	330시간 이상 7mA 이하	LTE 2.56s @ BATT 용량 : 2440mAh
대기 시간 (WCDMA)	330시간 이상 7mA 이하	DRX 7 @ BATT 용량 : 2440mAh
대기 시간 (GSM)	330시간 이상 7mA 이하	EGSM P5 @ BATT 용량 : 2440mAh
통화 시간 (WCDMA)	550분 이상 250mA 이하	10dBm @ BATT 용량 :2440mAh (AMR Mode시)
통화 시간 (GSM)	400분 이상 350mA 이하	EGSM, LV5 @ BATT 용량 : 2440mAh
통화 시간 (VT)	150분 이상(TBD) 900mA 이하 (TBD)	4G , Tx:+12dBm, Speaker Mode, Max volume @ BATT 용량 :2440mAh
통화시간 (LTE)	255분 이상 550mA 이하	LTE Cat2 @ TX 10dBm & Display ON(Default 밝기)
충전 시간	260분 이하	Display OFF

5. EOC 및 Recharging 조건

구분	Specification	측정 조건
Cut off Voltage	3.5V±0.05V 이하	SOC(%) : 2% ➔ 1%로 변경 시 Cut off
EOC (End Of Charging)	BATT 충전 전류 : 150±50mA이하	F370 (재)충전 종료 : BATT 전류 150±50mA 이하
Recharging	BATT 전압 : 4.25 ±0.05V 이하	BATT 전압 4.25±0.05V 이하

6. MP3 사용시간

구 분	Specification	측정 조건
Speaker	28시간 이상	기준 곡 : ELT_Mode.mp3 -92dBm, Half Rate, Backlight Off, Volume Max.
Ear Phone	65시간 이상	

7. Speaker 음압

내장벨 : 1m 음압 58dB ↑ (100%), 63dB ↑ (60%)

* 만충 Battery Test 기준

8. 8대 기본 품질

구분		Specification	Target	측정 조건
DOU (신규) (Day Of Usage)		0.9↑	1.2	LTE Profile Ver. 4.0 기준
발열 (ΔT) *	Game	$\Delta 17^{\circ}\text{C}$ (전면)/ $\Delta 20^{\circ}\text{C}$ (후면)	$\Delta 17^{\circ}\text{C}$ / $\Delta 20^{\circ}\text{C}$	With TA, Max 밝기 (현재: $\Delta 17^{\circ}\text{C}$ / $\Delta 20^{\circ}\text{C}$)
		$\Delta 17^{\circ}\text{C}$ (전면)/ $\Delta 20^{\circ}\text{C}$ (후면)	$\Delta 17^{\circ}\text{C}$ / $\Delta 20^{\circ}\text{C}$	W/O TA, Max 밝기 (현재: $\Delta 17^{\circ}\text{C}$ / $\Delta 20^{\circ}\text{C}$)
	Dual Recording (TBD)	$\Delta 15^{\circ}\text{C}$ (TBD)	$\Delta 17^{\circ}\text{C}$ (TBD)	Full HD, Default 밝기
	WiFi Streaming	$\Delta 15^{\circ}\text{C}$	$\Delta 15^{\circ}\text{C}$	Real streaming (main Band)
	LTE	$\Delta 15^{\circ}\text{C}$	$\Delta 15^{\circ}\text{C}$	LTE TX 15dBm
	WCDMA	$\Delta 18^{\circ}\text{C}$	$\Delta 18^{\circ}\text{C}$	WCDMA TX 23dBm
Handset 수신 음량 (Acoustic)		$-7 \pm 3 \text{ dB}$	$-7 \pm 3 \text{ dB}$	VoLTE, Torso type 3.3 거치 (Hot spot 기준)
Earphone 수신 음량 (Ear Acoustic)		$-5 \pm 3 \text{ dB}$	$-5 \pm 3 \text{ dB}$	Torso type 3.3 거치
LCD 색 좌표		$W_x = 0.3013$ $W_y = 0.3182$	$W_x = 0.3013 \pm 0.03$ $W_y = 0.3182 \pm 0.03$	White 이미지 밝기 Max
LCD 밝기		Min. 300 nit Min.120 nit	Min. 350 nit Min.120 nit	UI Max UI Default
야외 시인성		TBD	TBD	기 출시된 타사 대표 모델 동등 이상
Camera Shutter lag		50ms↓	50ms↓	High Tier 500 Lux 기준

* ΔT = 발열 측정 부위 (MAX) – 주변온도
측정 조건 : 별도 언급 없을 시, Display Off 상태 측정

제9조 시험 측정방법 및 규정

1. 전기적 특성 측정방법
: 제품성능 시험업무세척 LG(45)-B-4602-51 표준 시험방법에 준한다.
2. 제품 신뢰성 시험
: 제품 신뢰성 시험업무세척 LG(45)-B-4602-54 표준 시험방법에 준한다.
3. U/I검증 업무세척
: QE U/I검증 업무세척 LG(45)-B-4602-53 표준 시험방법에 준한다.
4. Field Test 업무세척
: QE Field Test 업무세척 LG(45)-B-4602-52 표준 시험방법에 준한다.

제10조 신기능 추가에 따른 시험 방법 및 SPEC.정의

1. S/W적인 신기능은 사용설명서에 언급된 방법에 준한다.

LTE DebugScreen

SKT    오후 6:04

 Debug Screen

SKT LTE Info.
Mode Pref. : Automatic
EARFCN(D/U) : 1350 / 19350
Band / BW : B3 / 20MHz
PLMN : 450-05
TAC : 6406(0x1906)
eNB ID(PCI) : 16408(294)
RSRP / Tx : -92 / OFF
RSRQ / SINR : -11 / 5.8
RSSI : -62
DRX / L2W : 1280ms / -106
CQI / RI : 07 / 01
EMM Cause : 0x00
EMM State : REGISTERED
SUB State : NORMAL_SERVICE
RRC : IDLE
SRV Status : SRV
SRV Domain : CS_PS
GUTI :
450-05-0180-05-077401F0
TMSI : 68857D0C
IMS IPv4 : 223.51.187.93
DATA IPv4 : 10.182.34.157
AVG RSRP : -92
ANT BAR : 4

VoLTE

Wi-Fi

EARFCN (DL/UL) : DL/UL Channel 정보 :

Band / BW : 단말의 Band 및 BandWidth

Ex) B7 / 20MHz

PLMN : MCC (mobile country code) MNC (mobile network code)

Ex) SKT : 450 05

TAC : Tracking Area Code

eNB ID(PCI) : 현재 Cell의 정보

RSRP / TX: Serving Cell RSRP / Tx Power

RSRQ / SINR : Serving Cell RSRQ/RSRP

RSSI : Serving Cell RSSI

DRX / L2W : DRX주기 / LTE neighbor cell measure info

CQI / RI : Channel Quality Indicator / Rank Indicator

EMM Cause : LTE EPS Network으로부터 받은 reject cause.

Ex) LTE_NAS_ILLEGAL_ME / LTE_NAS_NW_FAILURE ...

EMM Status

Ex) EMM_DEREGISTERED / EMM_REGISTERED

SUB Status

Ex) NORMAL_SERVICE

SRV Status: 현재 단말의 서비스 Status

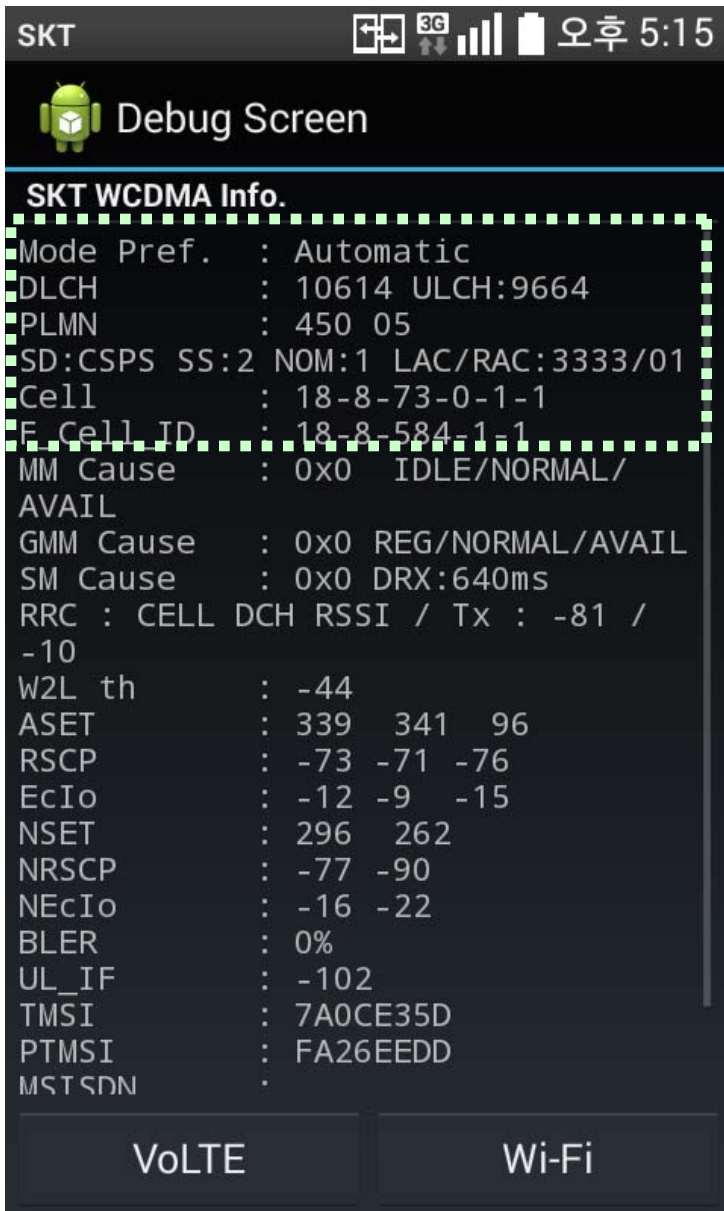
Ex) No service. / Limited Service

SRV Domain

Ex) CS / PS

ANT BAR: 안테나 레벨

WCDMA DebugScreen(1/2)



DLCH : 단말이 잡고 있는 Downlink WCDMA channels

ULCH : 단말이 잡고 있는 Uplink WCDMA channels

PLMN : MCC (mobile country code) MNC (mobile network code)

Ex) China Unicom: 460 01

Service Domain : 현재 단말이 지원 가능한 서비스 도메인

Ex) CS (Circuit switched), PS (Packet switched), CSPA

NOM (Network Operation Mode) : 망 동작 모드

Ex) 1 (Combined 로 등록 및 서비스), 2 (CS, PS 각각 등록 및 서비스)

LAC (Location Area Code)/RAC (Routing Area Code): CS/PS용 지역 코드

Cell : 현재 cell 의 정보:

Ex) XXX(MSC)-XX(RNC)-XXX(NODE_B)-XX(sector)-X(fa)-X(reserved)

F_Cell_ID : Femto cell id

MM (Mobility Management) Cause, state/substate/service 상태:

MM 도메인에서 망으로부터 받은 reject cause, MM state, MM substate, Service 상태

Ex) 0x0/IDLE/NORMAL/AVAIL : CS Domain으로 정상 등록 후 Idle 상태

Substate

MM_NULL_SUBSTATE - 'NULL'

MM_NO_IMSI - 'NO IMSI'

MM_PLMN_SEARCH - 'PLMN SRCH'

MM_LIMITED_SERVICE - 'LIMITED'

MM_ATTEMPTING_TO_UPDATE - 'ATTEMP UP'

MM_LOCATION_UPDATE_NEEDED - 'LU NEED'

MM_NO_CELL_AVAILABLE - 'NO CELL'

MM_PLMN_SEARCH_NORMAL_SERVICE - 'PLMN SRCH N'

MM_NORMAL_SERVICE - 'NORMAL'

GMM (GPRS MM) Cause, state/substate/ service 상태:

GMM 도메인에서 망으로부터 받은 reject cause, MM state, MM substate, service 상태

Ex) 0x0/REG/NORMAL/AVAIL : PS Domain으로 정상 REG 상태

WCDMA DebugScreen(2/2)

SKT

Debug Screen

SKT WCDMA Info.

Mode Pref. : Automatic
DLCH : 10614 ULCH:9664
PLMN : 450 05
SD:CSPS SS:2 NOM:1 LAC/RAC:3333/01
Cell : 18-8-73-0-1-1
F_Cell_ID : 18-8-584-1-1
MM Cause : 0x0 IDLE/NORMAL/
AVAIL
GMM Cause : 0x0 REG/NORMAL/AVAIL
SM Cause : 0x0 DRX:640ms
RRC : CELL DCH RSSI / Tx : -81 /
-10
W2L th : -44
ASET : 339 341 96
RSCP : -73 -71 -76
EcIo : -12 -9 -15
NSET : 296 262
NRSCP : -77 -90
NEcIo : -16 -22
BLER : 0%
UL_IF : -102
TMSI : 7A0CE35D
PTMSI : FA26EEDD
MSTSDN :

VoLTE

Wi-Fi

DRX (Discontinuous Reception cycle length) : 단말기가 수신한 DRX
cycle length 계수에 의해 계산된 DRX cycle length 값
Ex) DRX cycle length가 6인 경우 : $2^6 = 640\text{ms}$

RRC (Radio Resource Control): RRC state 정보
DISCONN : RRC_STATE_DISCONNECTED
CONNECTING : RRC_STATE_CONNECTING
CELL FACH : RRC_STATE_CELL_FACH
CELL DCH : RRC_STATE_CELL_DCH
CELL PCH : RRC_STATE_CELL_PCH
URA PCH : RRC_STATE_URA_PCH

RSSI/Tx : RSSI / Tx power dBm기준

ASET: Active SET의 PSC 정보 (최대 3개까지 display)

RSCP: Active SET의 RSCP (Received Signal Channel Power) dBm

EcIo: Active SET의 Energy / Interference 정보 dB

NSET: Neighbor SET의 PSC 정보 (최대 3개까지 display)

NRSCP : Neighbor SET의 RSCP (Received Signal Channel Power) dBm

NEcIo : Neighbor SET의 Energy / Interference 정보 dB

BLER : Block Error Rate

TMSI : 위치등록 결과 망에서 받은 TMSI 정보

PTMSI : 위치등록 결과 망에서 받은 PTMSI 정보

GSM DebugScreen



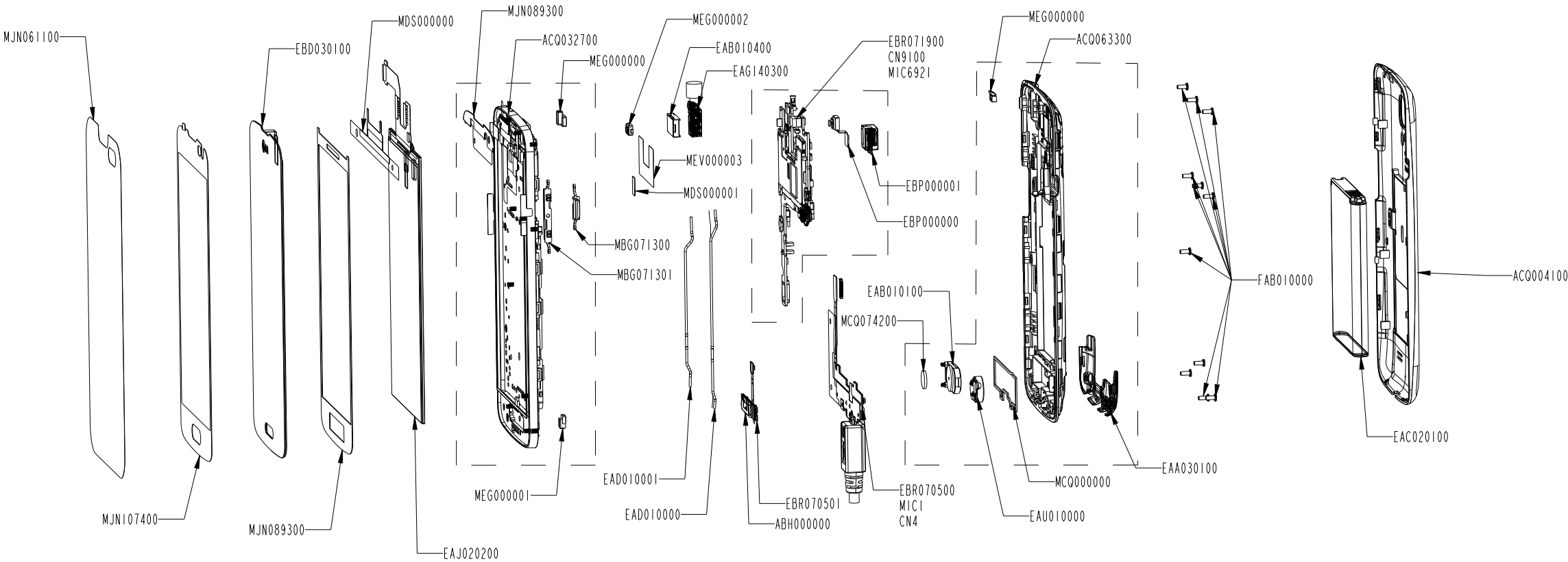
ARFCN : 단말이 잡고 있는 GSM channel
CELL : 단말이 잡고 있는 GSM Cell Identifier
PLMN : : MCC MNC
Ex) China Unicom: 460 01
CN : 현재 단말이 지원 가능한 서비스 도메인
Ex) CS (Circuit switched), PS (Packet switched), CSPS
NMO : 망 동작 모드
Ex) 1 (Combined 로 등록 및 서비스), 2 (CS, PS 각각 등록 및 서비스)
LAC/RAC: CS/PS용 지역 코드
Multiframe : sleep에서 깨어나는 주기
Rx : Rx Power
RX_qual : BER 에 준한 Rx quality level 정보
Tx : Tx Power
Band: 현재 단말이 획득하고 있는 망 band 종류 Ex) IMT
MM Cause, state/substate: MM 도메인에서 망으로부터 받은 reject cause,
MM state, MM substate 정보
Ex) 0x0 IDLE/NORMAL
GMM Cause, state/substate: GMM 도메인에서 망으로부터 받은 reject
cause, MM state, MM substate 정보
Ex) 0x0 REG/NORMAL
RR: RR state 정보
SS : 현재 Service status 정보
Ex) 2 (In service state)
GL1 : Layer 1 state 정보
Ex) ACQ

<GSM> ARFCN Rxlev C1 C2
SCELL: 현재 단말이 획득하고 있는 망 정보
(C1/C2 = Cell selection을 위한 param.)
NARFCN: 현재 단말 주변 cell channel 정보
NRXLEV : 현재 단말 주변 Rx power

다. 분해 조립도

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F370S

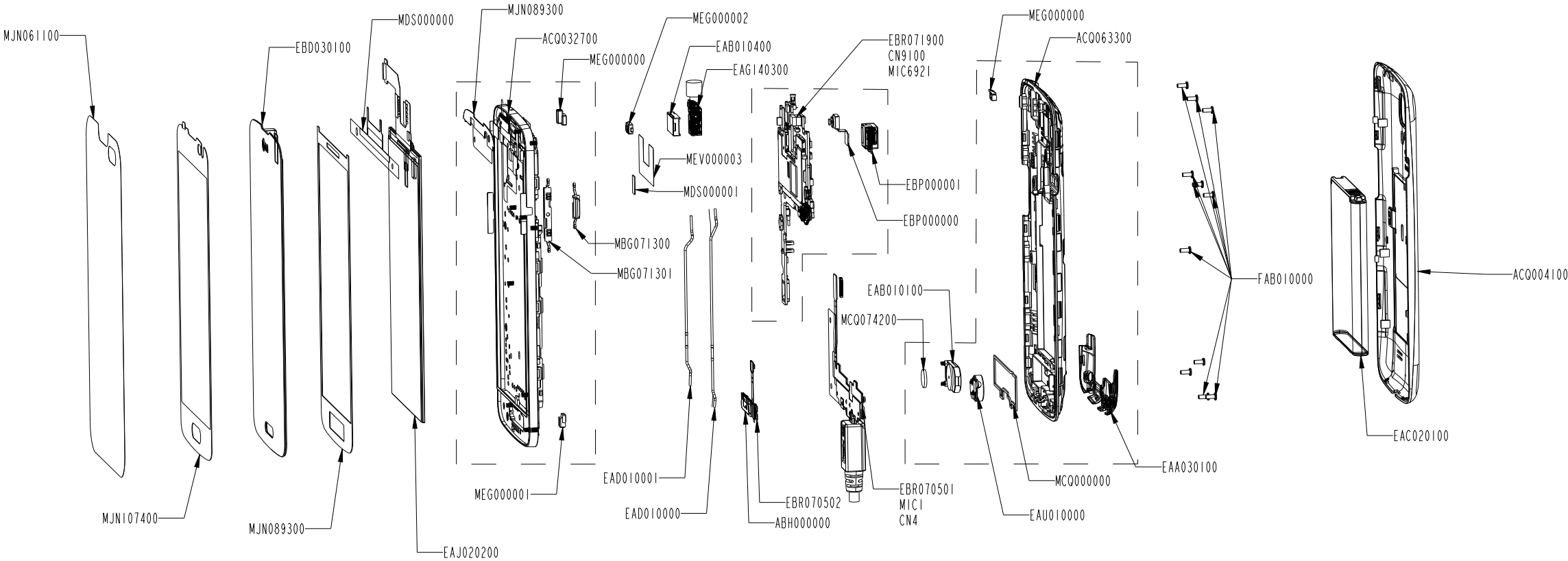


EBR070500	PCB Assembly,Flexible	MJN089300	Tape,Window	EAG140300	Jack,Phone	EAA030100	PIFA Antenna,Multiple
MIC1	Microphone,Condenser	EAD010000	Cable,Assembly	MDS000000	Gasket	EBR071900	PCB Assembly,Main
CN4	Connector,I/O	EAB010400	Receiver	MDS000001	Gasket	CN9100	Connector,Terminal Block
EBR070501	PCB Assembly,Flexible	MJN061100	Tape,Protect	MJN107400	Tape,USP Film	MIC6921	Microphone,Condenser
ABH000000	Button Assembly	MJN089300	Tape,Window	ACQ063300	Cover Assembly,Rear	EBP000000	Camera Module
ACQ032700	Cover Assembly,Front	MEV000003	Insulator	EAU010000	Motor,DC	EBP000001	Camera Module
MEG000000	Holder	MEG000002	Holder	EAB010100	Speaker,Dual Mode	FAB010000	Screw,Machine
MEG000001	Holder	EAJ020200	LCD,Module-TFT	MEG000000	Holder	ACQ004100	Cover Assembly,Battery
MBG071301	Button,Side	EBD030100	Touch Window Assembly	MCQ074200	Damper,Speaker	EAC020100	Rechargeable Battery,Lithium Ion
MBG071300	Button,Side	EAD010001	Cable,Assembly	MCQ000000	Damper		

No	Part Name				Part Number		Q'ty	Remark	
Material									
Unit	Scale	Size	Sheet	Designed By		Model Name	00_D315_GFF_PHONE		
mm	1:1	A3	1/2	Date		Drawing			
		 3rd Angle Projection		Approved By		Drawing Name			
				Date		Drawing Number			

F370L

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EBR070501	PCB Assembly,Flexible	MJN089300	Tape,Window	EAG140300	Jack,Phone	EAA030100	PIFA Antenna,Multiple
MIC1	Microphone,Condenser	EAD010000	Cable,Assembly	MDS000000	Gasket	EBR071900	PCB Assembly,Main
CN4	Connector,I/O	EAB010400	Receiver	MDS000001	Gasket	CN9100	Connector,Terminal Block
EBR070502	PCB Assembly,Flexible	MJN061100	Tape,Protect	MJN107400	Tape,USP Film	MIC6921	Microphone,Condenser
ABH000000	Button Assembly	MJN089300	Tape,Window	ACQ063300	Cover Assembly,Rear	EBP000000	Camera Module
ACQ032700	Cover Assembly,Front	MEV000003	Insulator	EAU010000	Motor,DC	EBP000001	Camera Module
MEG000000	Holder	MEG000002	Holder	EAB010100	Speaker,Dual Mode	FAB010000	Screw,Machine
MEG000001	Holder	EAJ020200	LCD,Module-TFT	MEG000000	Holder	ACQ004100	Cover Assembly,Battery
MBG071301	Button,Side	EBD030100	Touch Window Assembly	MCQ074200	Damper,Speaker	EAC020100	Rechargeable Battery,Lithium Ion
MBG071300	Button,Side	EAD010001	Cable,Assembly	MCQ000000	Damper		

라. 블록도

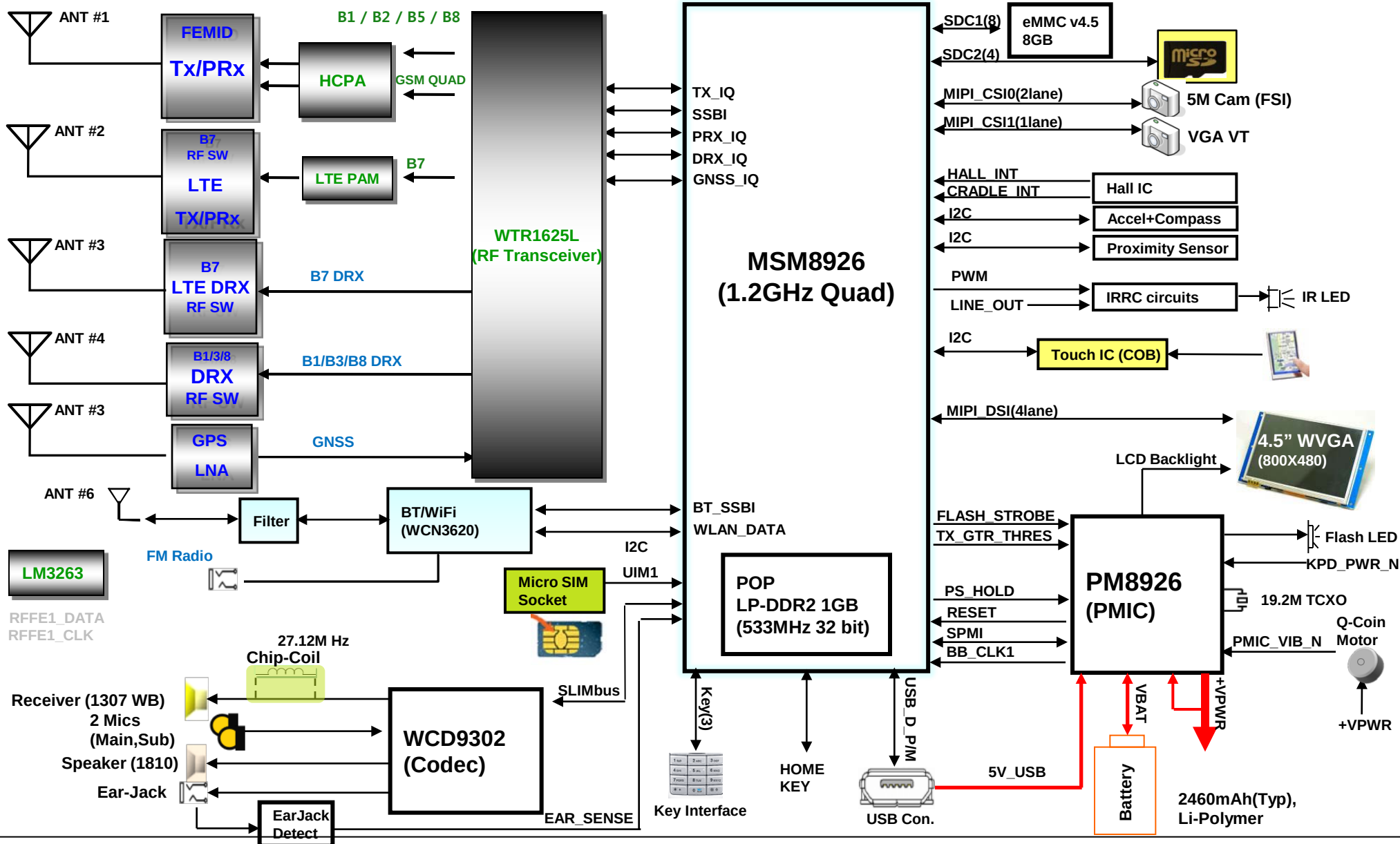


LG Electronics



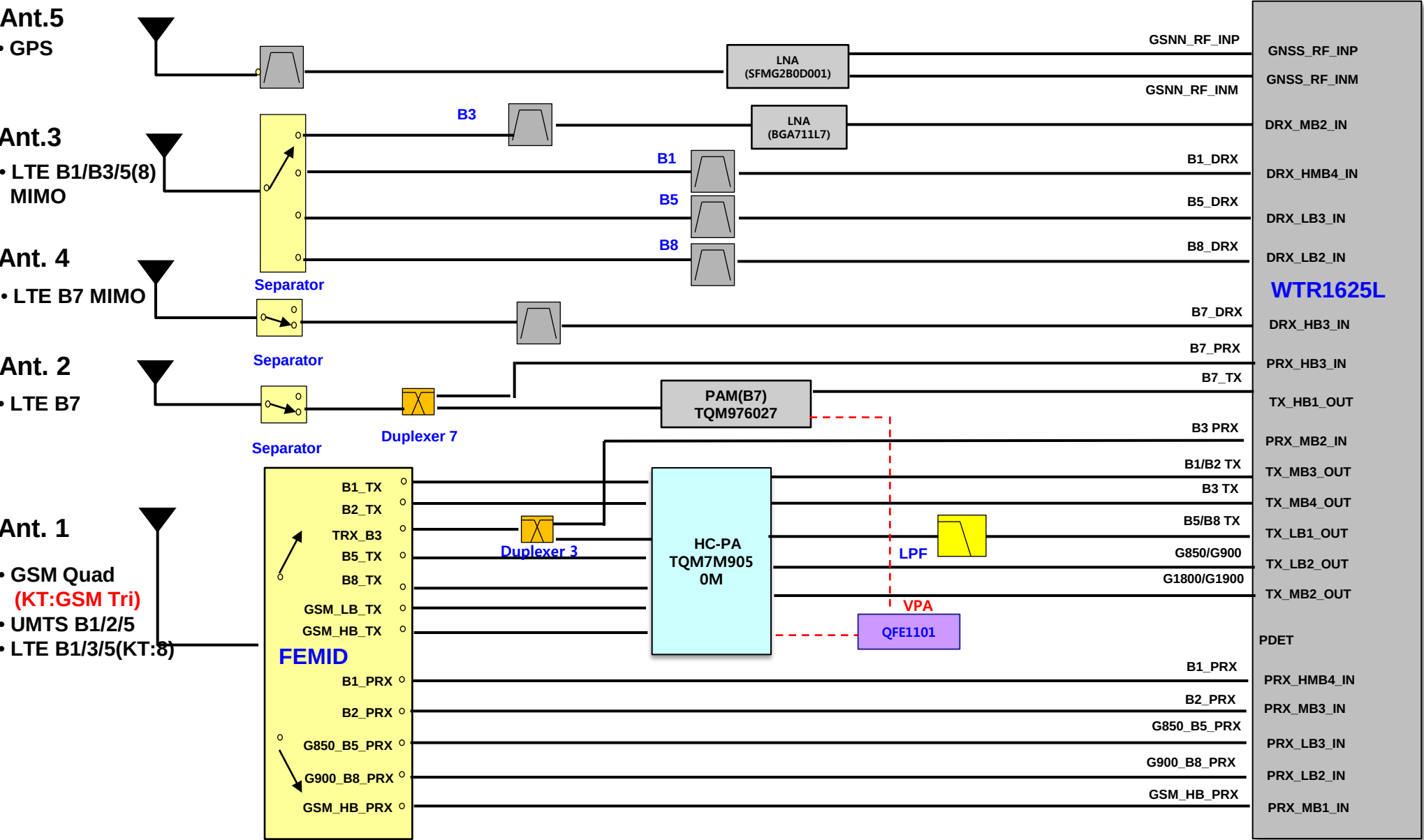
1. F370L/S/K Block Diagram

LGE Internal Use Only

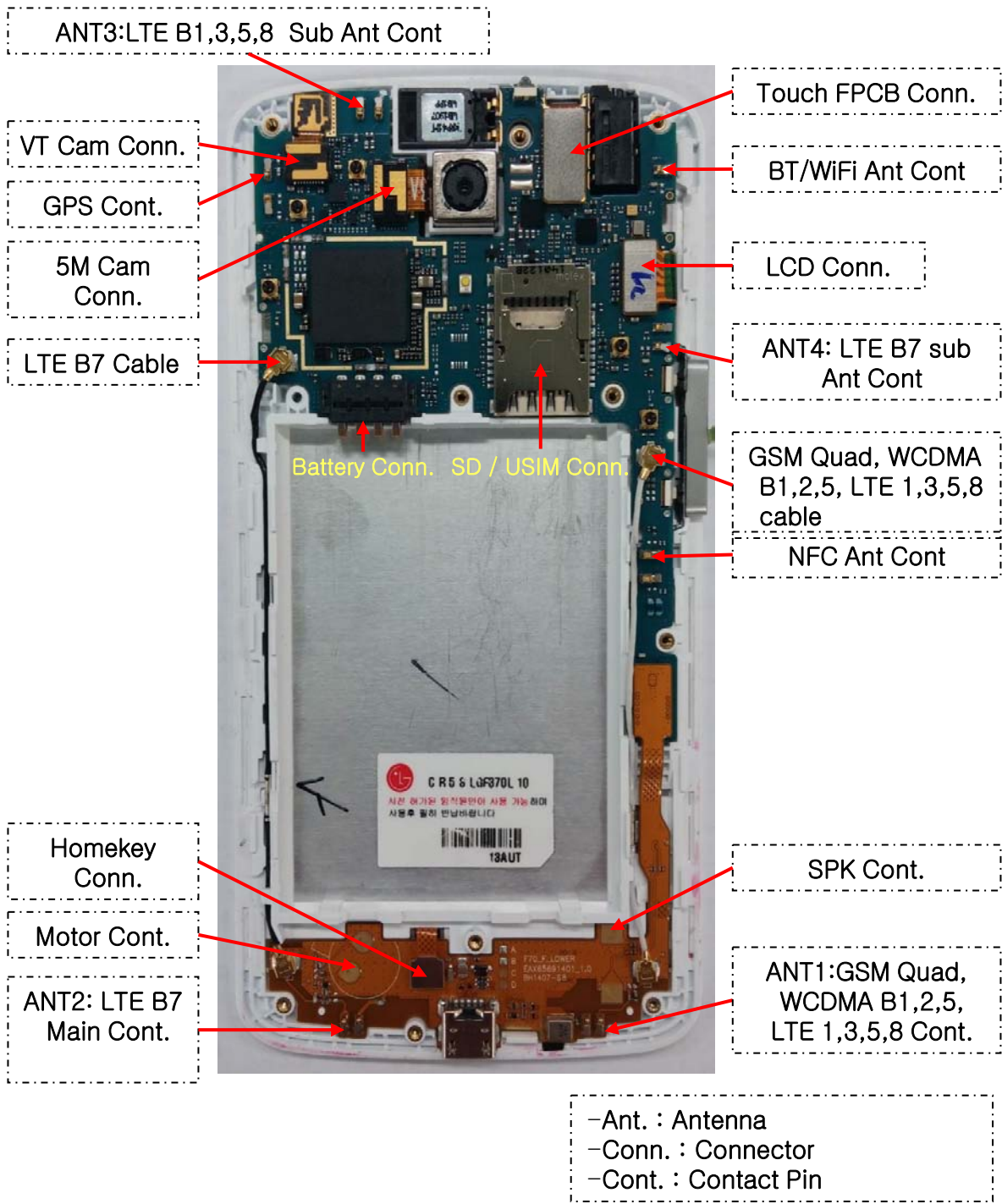


2. RF Block Diagram

LGE Internal Use Only



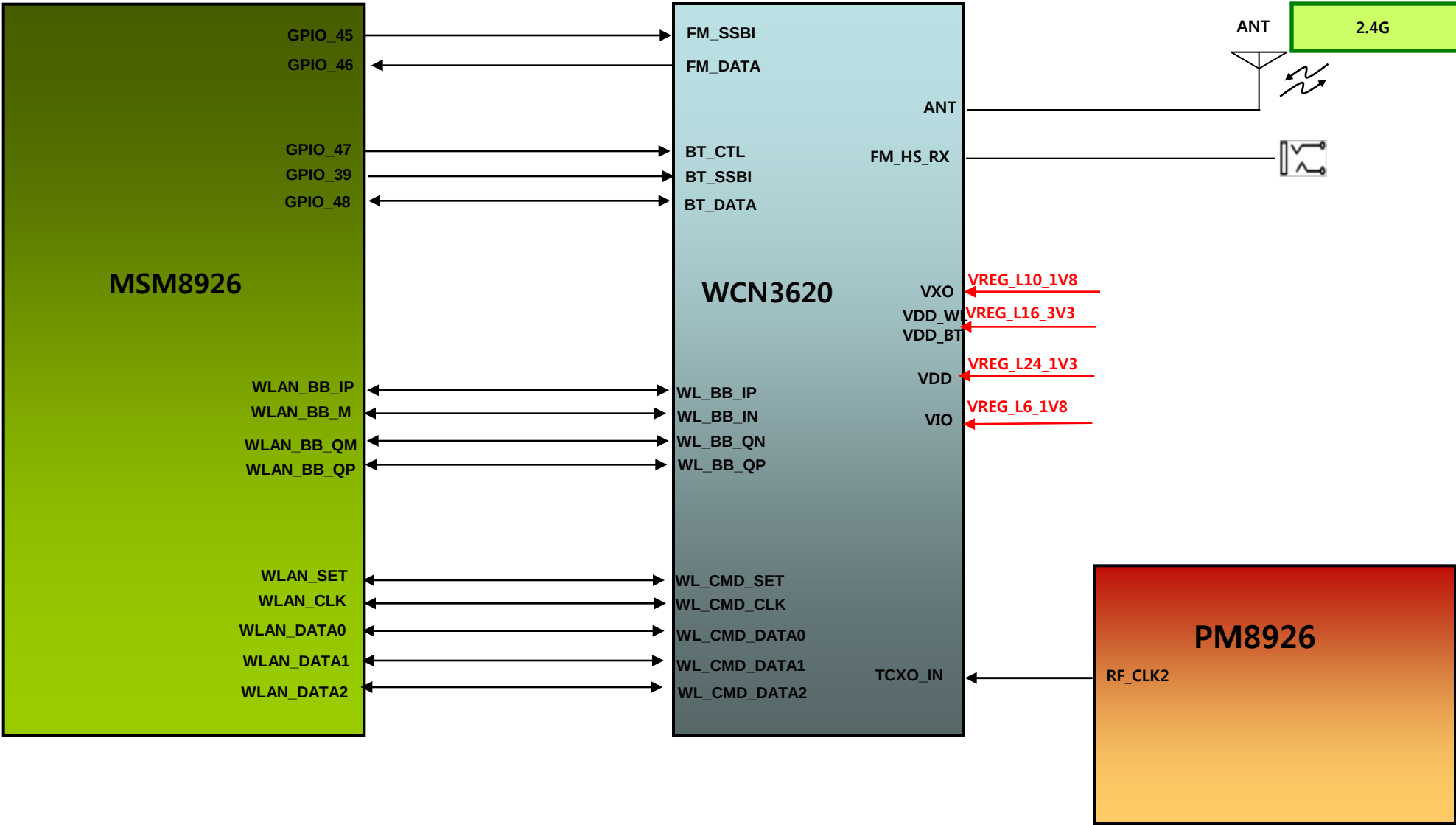
3. System HW Block Diagram : Antenna 배치



	LG U+	SKT	KT
ANT1	GSM Quad WCDMA B1/2/5 LTE B1/3/5/7	GSM Quad WCDMA B1/2/5 LTE B1/3/5/7	GSM Quad WCDMA B1/2/5 LTE B1/5/7/8
ANT2	LTE B7	LTE B7	LTE B7
ANT3	LTE B1/3/5 _{MIMO}	LTE B1/3/5 _{MIMO}	LTE B1/3/8 _{MIMO}
ANT4	LTE B7 _{MIMO}	LTE B7 _{MIMO}	LTE B7 _{MIMO}

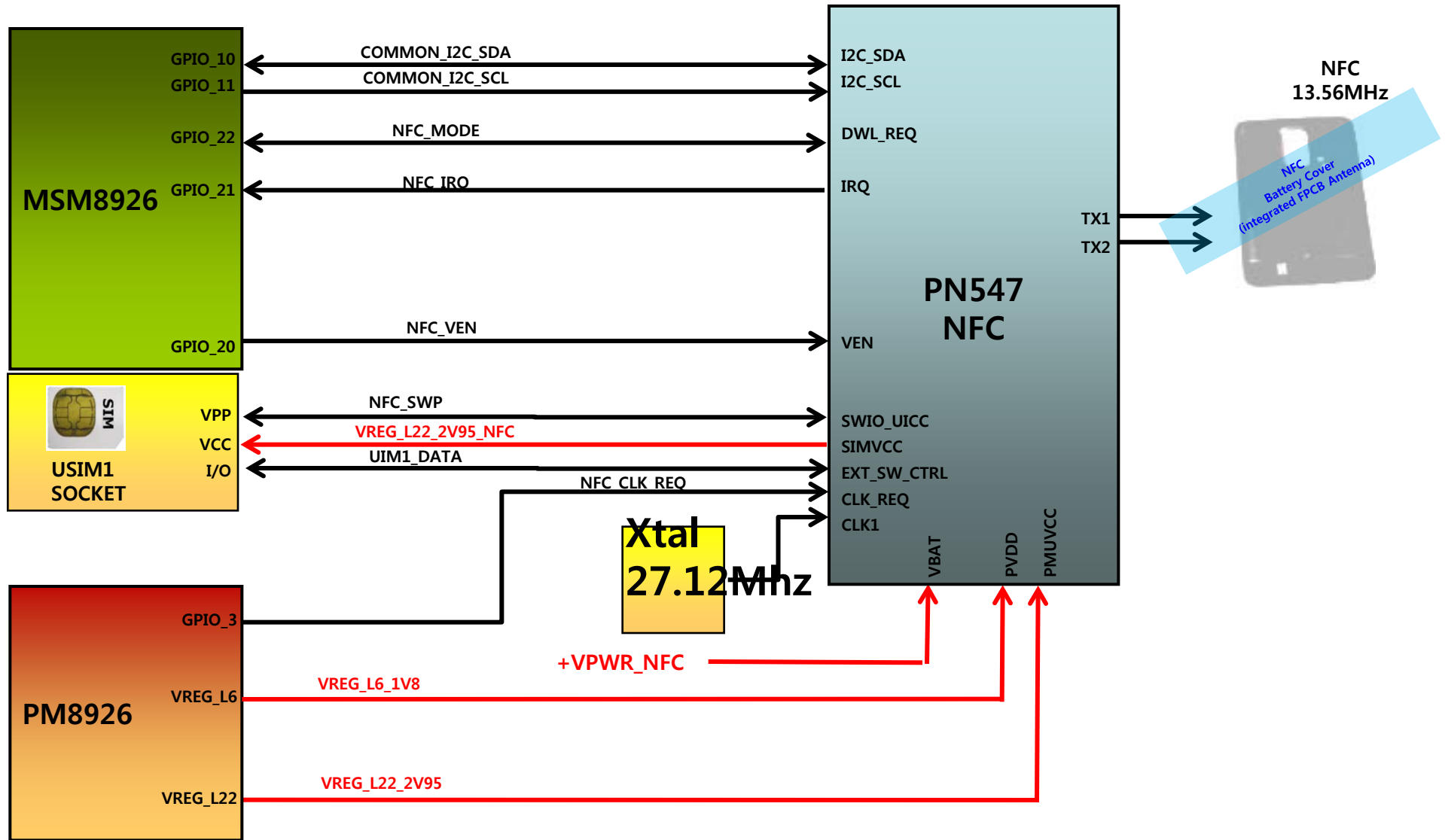
8. BT/WiFi/FM Block Diagram

LGE Internal Use Only



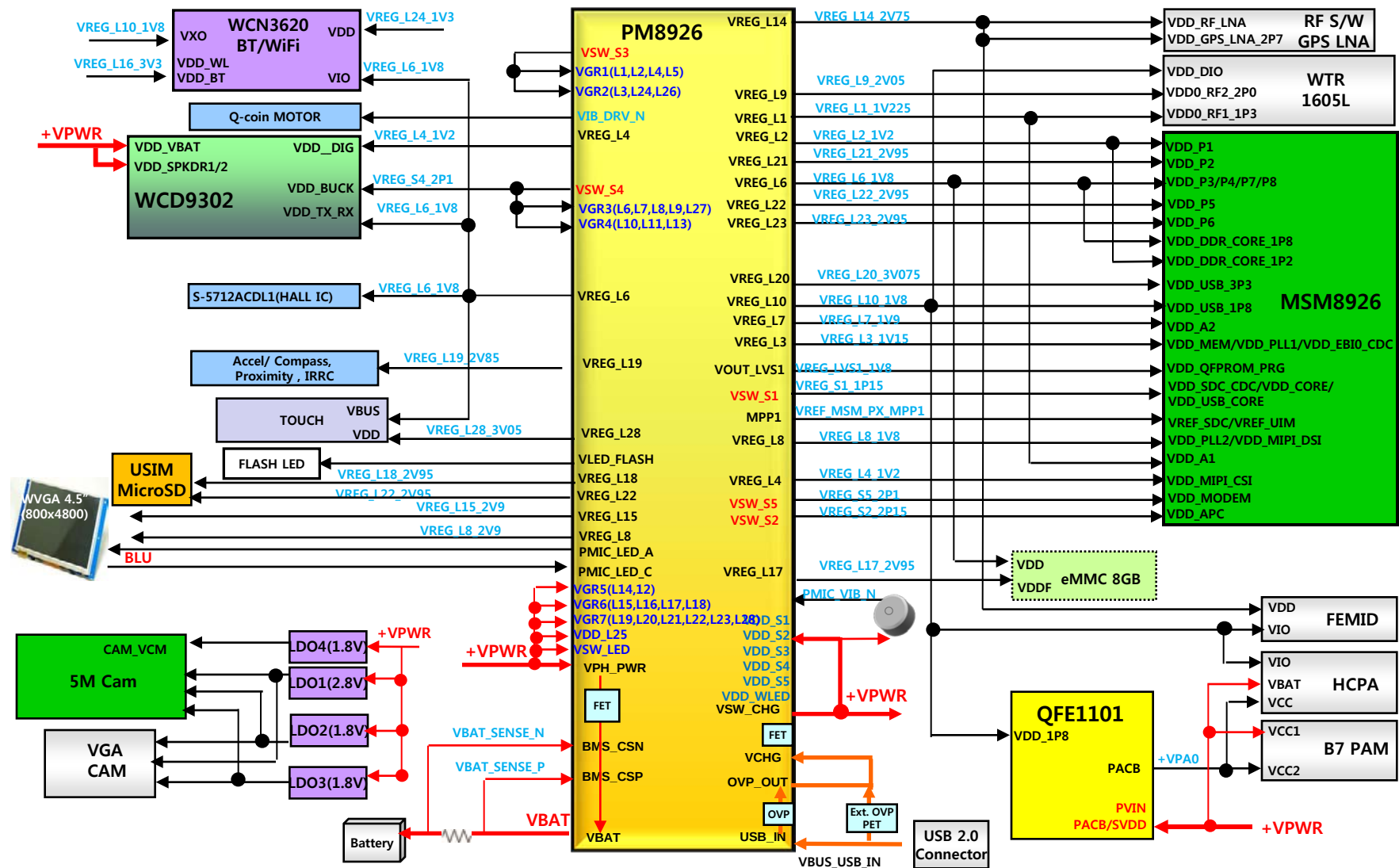
9. NFC Block Diagram

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3. PM8926 Power Management

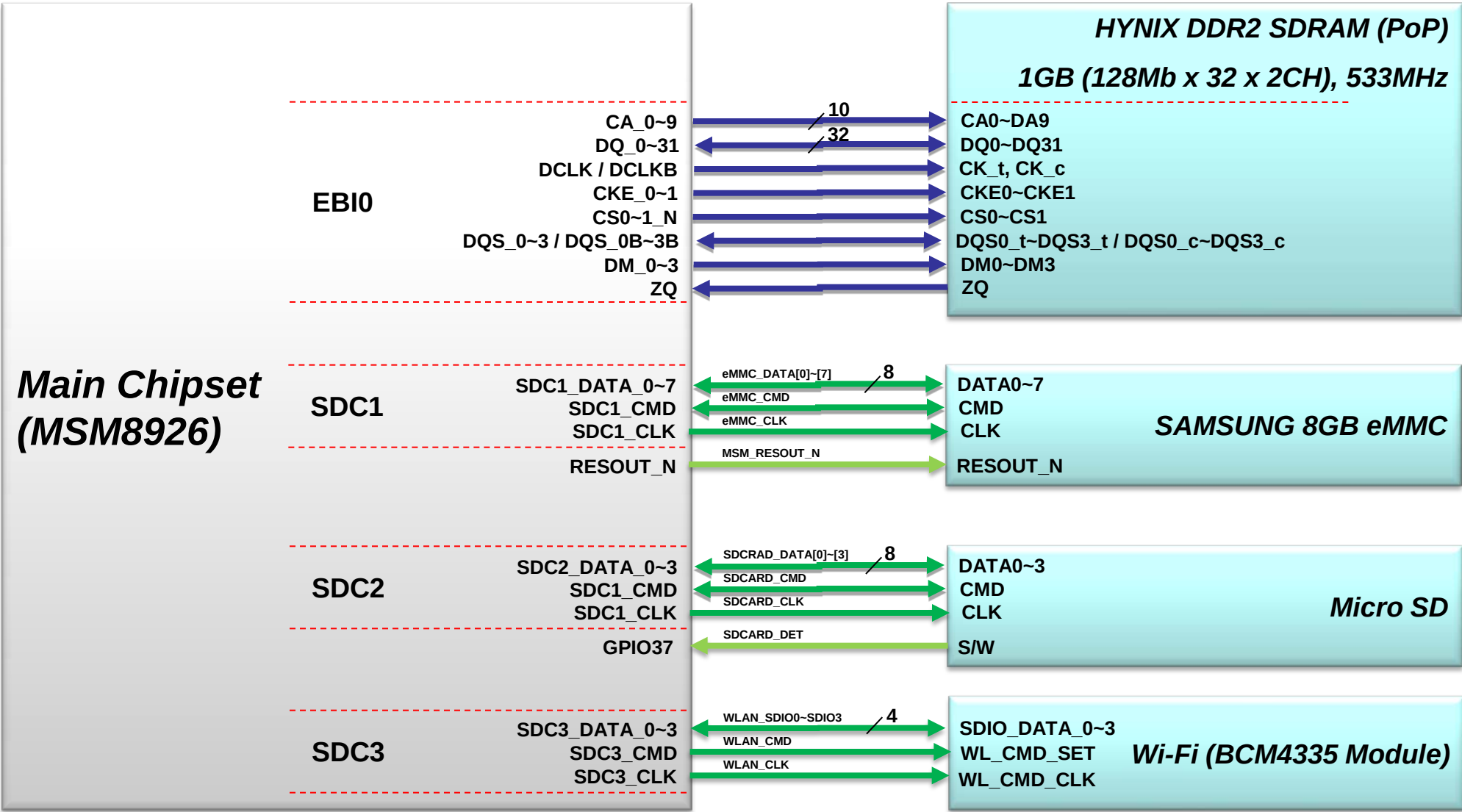
LGE Internal Use Only



+VPWR

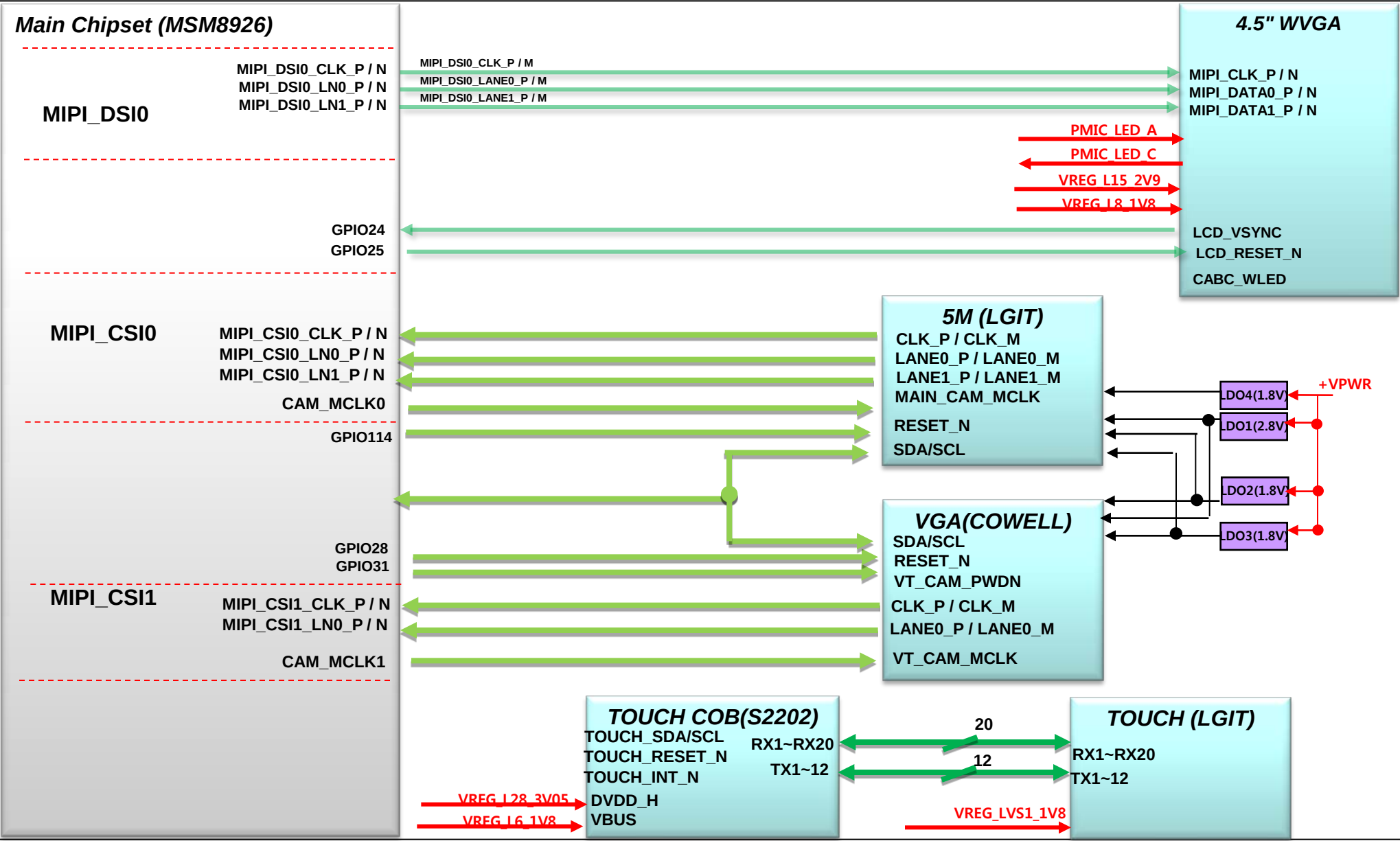
4. Memory Interface

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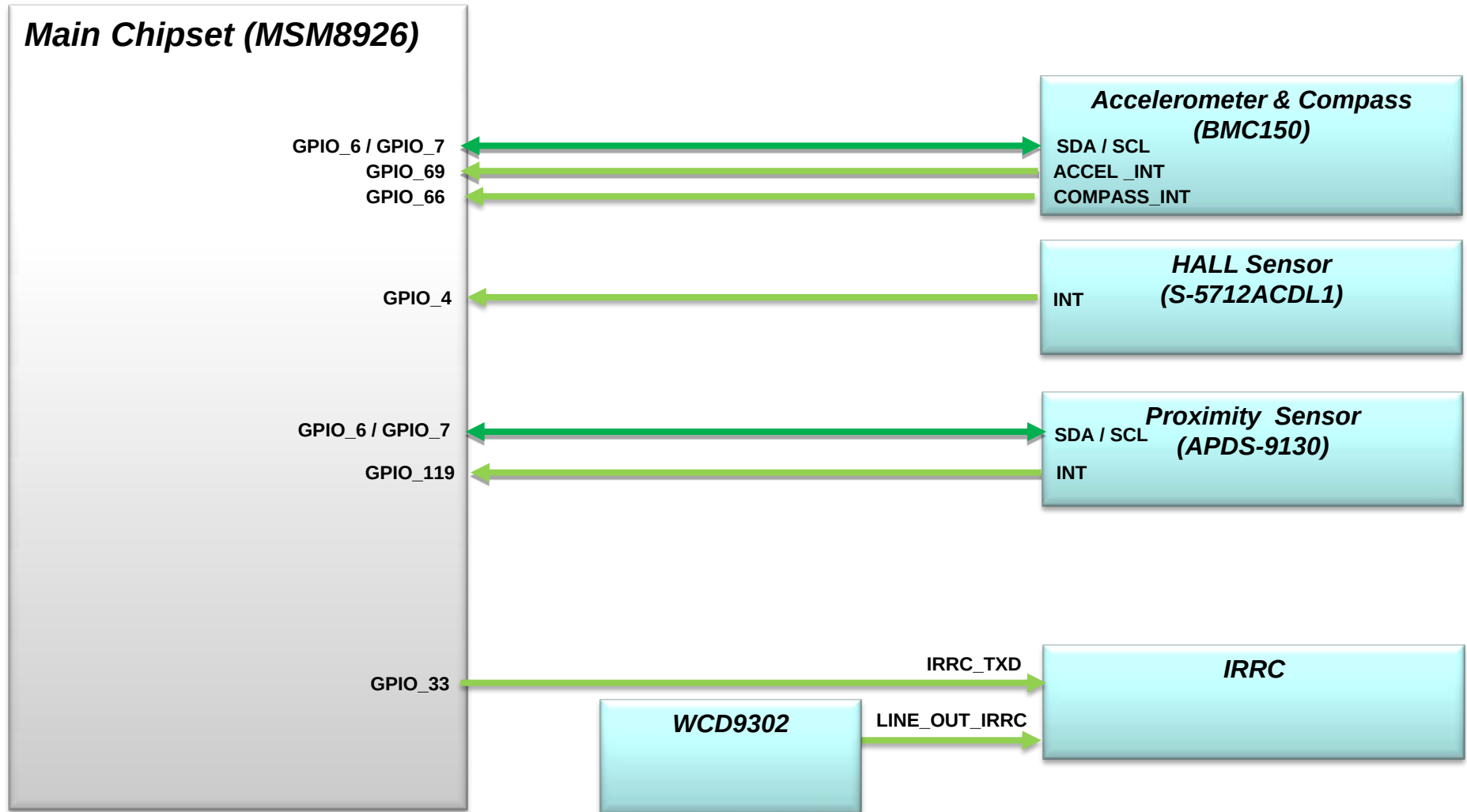
5. LCD & Camera & Touch Interface

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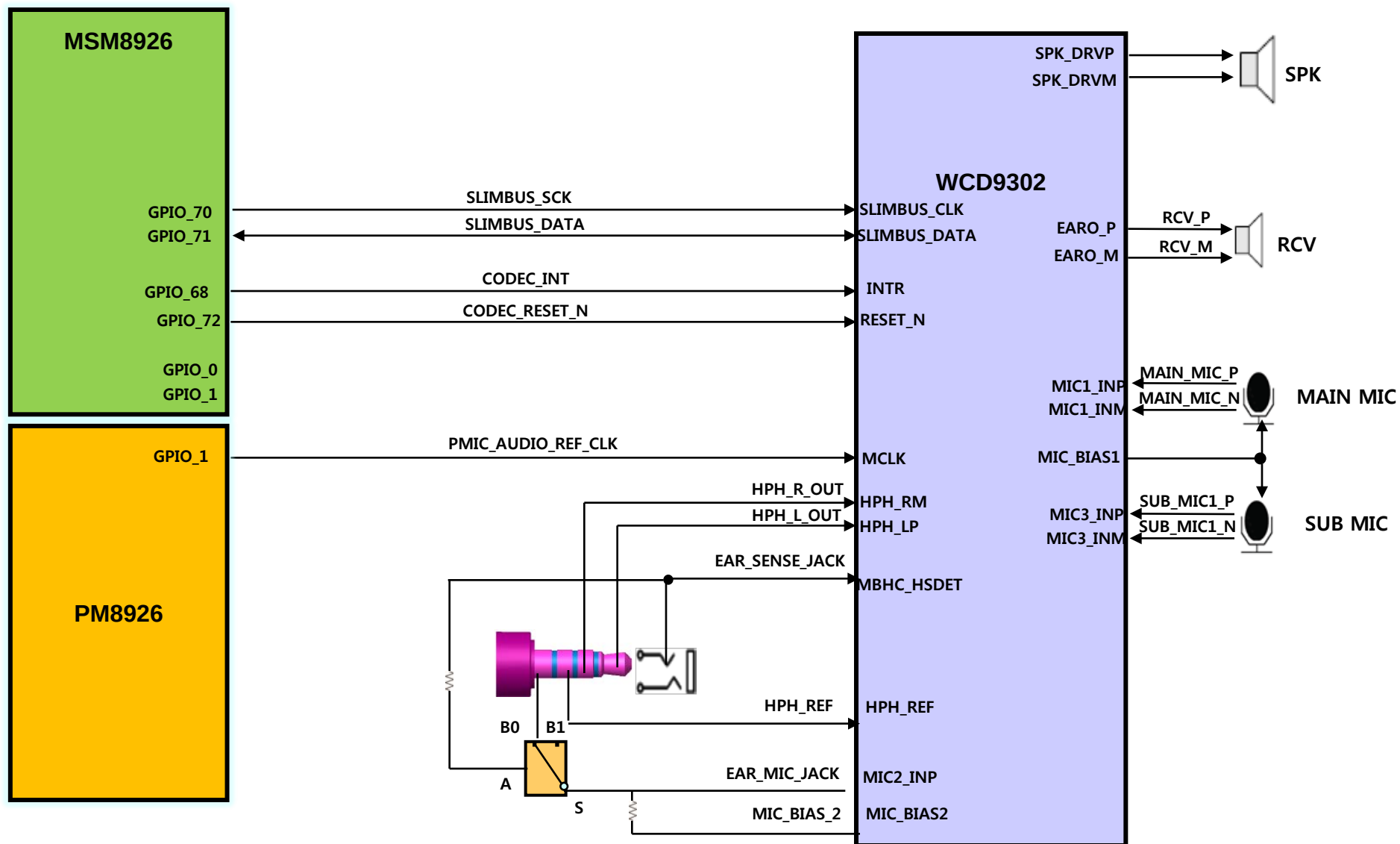


6. Sensor Interface

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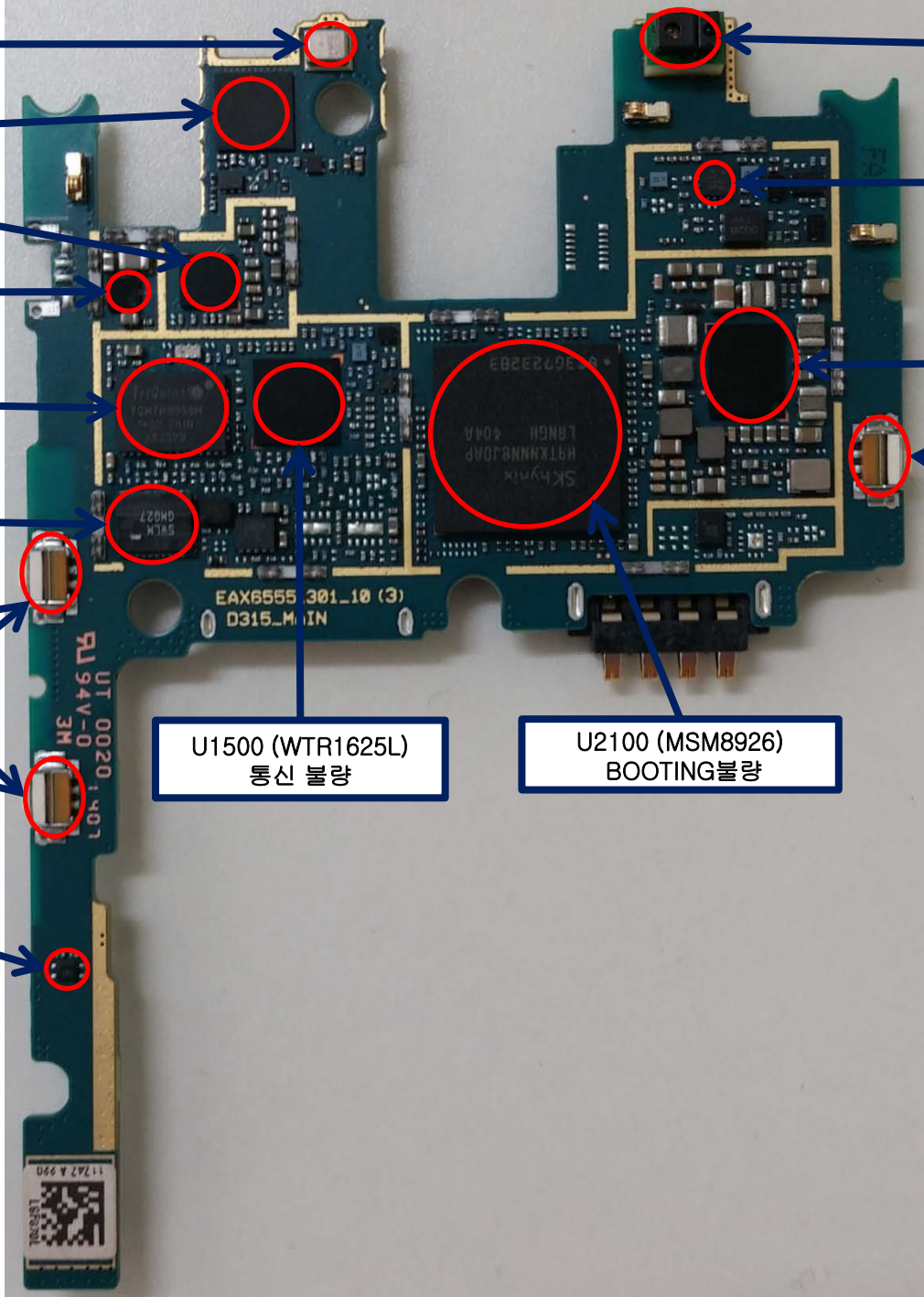
7. Audio Block Diagram



마. 부품 배치 및 One Point 수리법



F370 MAIN BOARD TOP



MIC6921 (MIC)
SPK PHONE 송화음 불량

U7300 (S2202)
TOUCH 불량

U5100 (WCN3620)
BT/WIFI 불량

U1700 (LM3263)
송신 불량

U1300 (TQM7M9050M)
통신 불량

FL1201 (FEMID)
RF RX/TX 불량

SW9710/9712 (VOL. SW)
볼륨 조절 불량

U8700 (HALL IC)
HALL IC 불량

U1500 (WTR1625L)
통신 불량

U2100 (MSM8926)
BOOTING불량

u8400 (PROXIMITY)
근접센서 불량

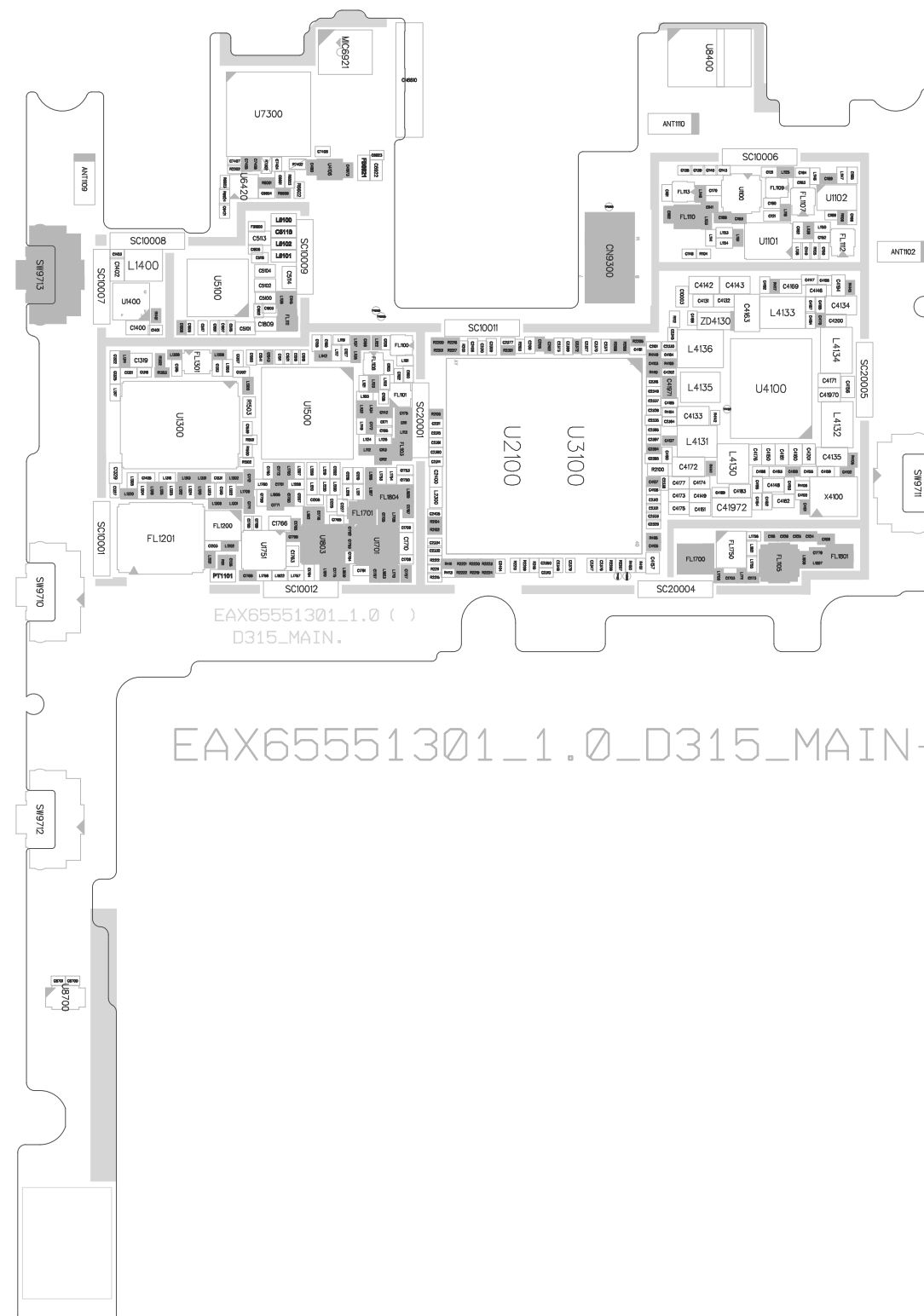
U1100 (RF1616)
수신 불량

U4100 (P8926)
전원불량

SW9711 (PWR SW)
BOOTING 불량

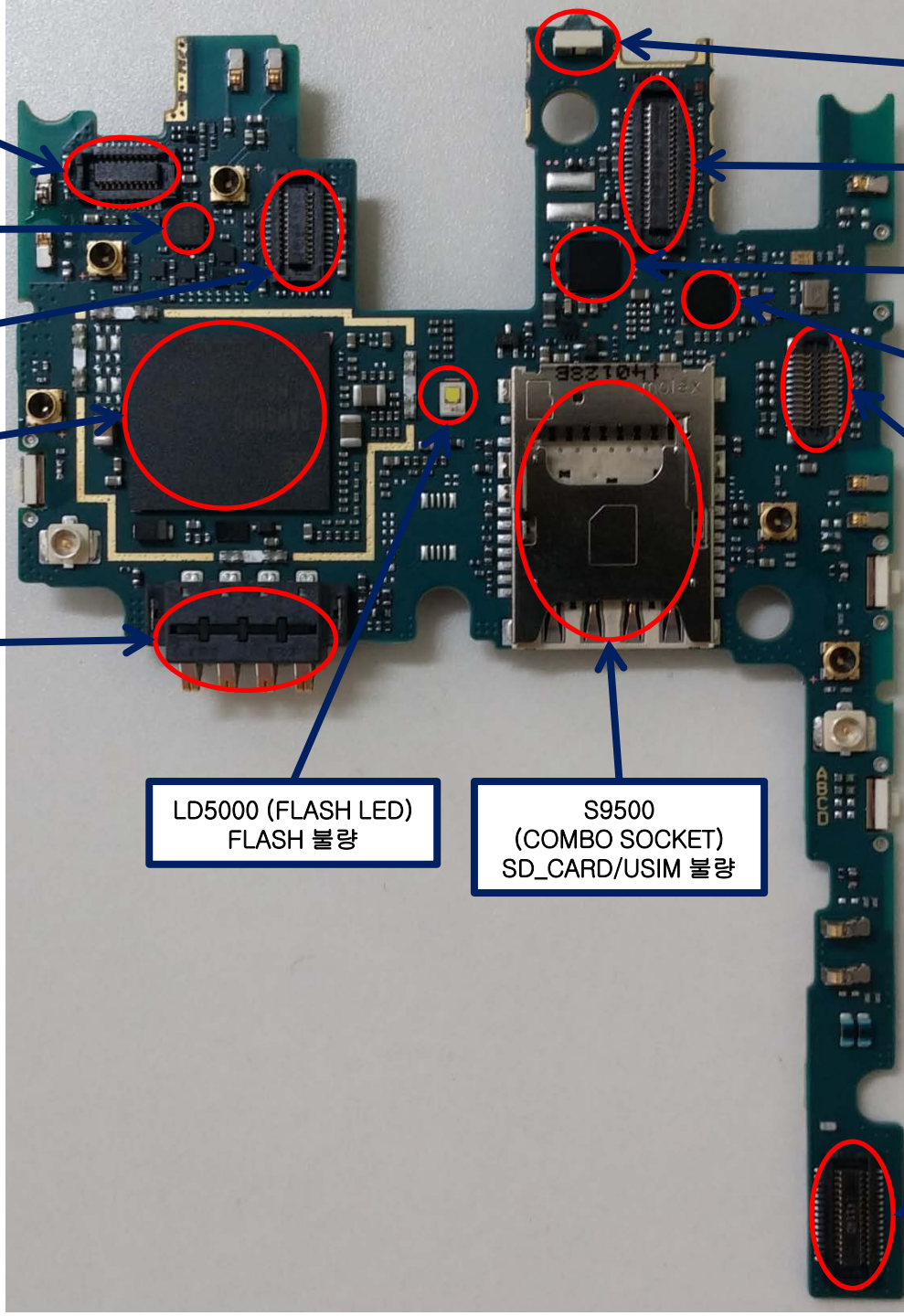
F370L

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F370 MAIN BOARD BOT

- CN7400
(FRONT CAM CONN.)
FRONT CAM 불량
- U8100 (BMC150)
ACCEL, COMPASS 불량
- CN7300 (MAIN CAM CONN.)
MAIN CAM 불량
- U3200 (eMMC MEMORY)
부팅 불량
- CN9100
(BATTERY CONN.)
부팅 불량



- LD5000 (FLASH LED)
FLASH 불량

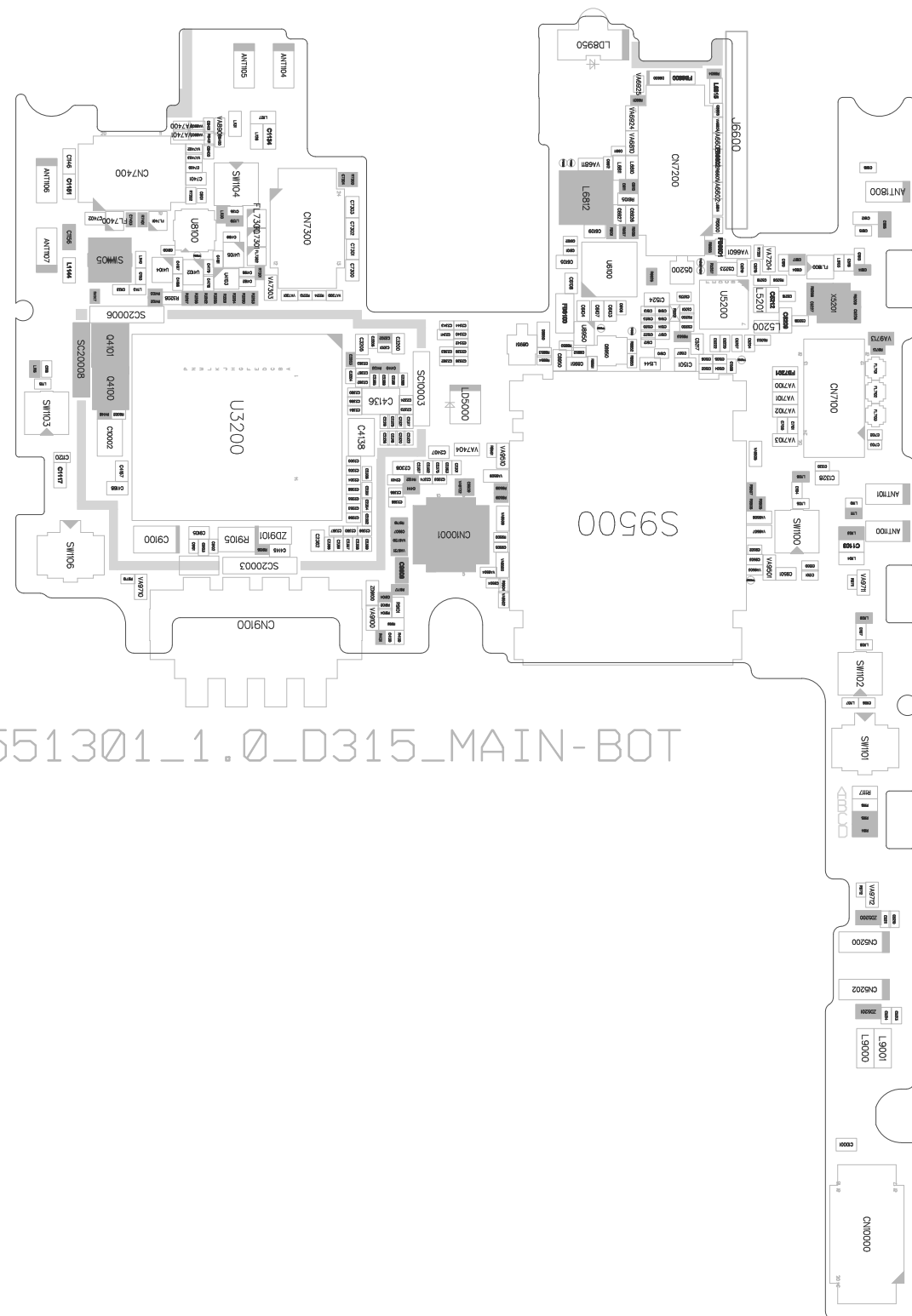
- S9500
(COMBO SOCKET)
SD_CARD/USIM 불량

- LD8950 (IRRC)
리모컨 불량
- CN7200
(TOUCH CONN.)
터치 불량
- U6100 (WCD9320)
AUDIO 불량
- U5200 (PN547)
NFC 불량
- CN7100 (LCD CONN.)
LCD 불량

- CN10000
(F_LOWER CONN.)
충전
/USB/HOMEKEY/MIC/진
동/통화 불량

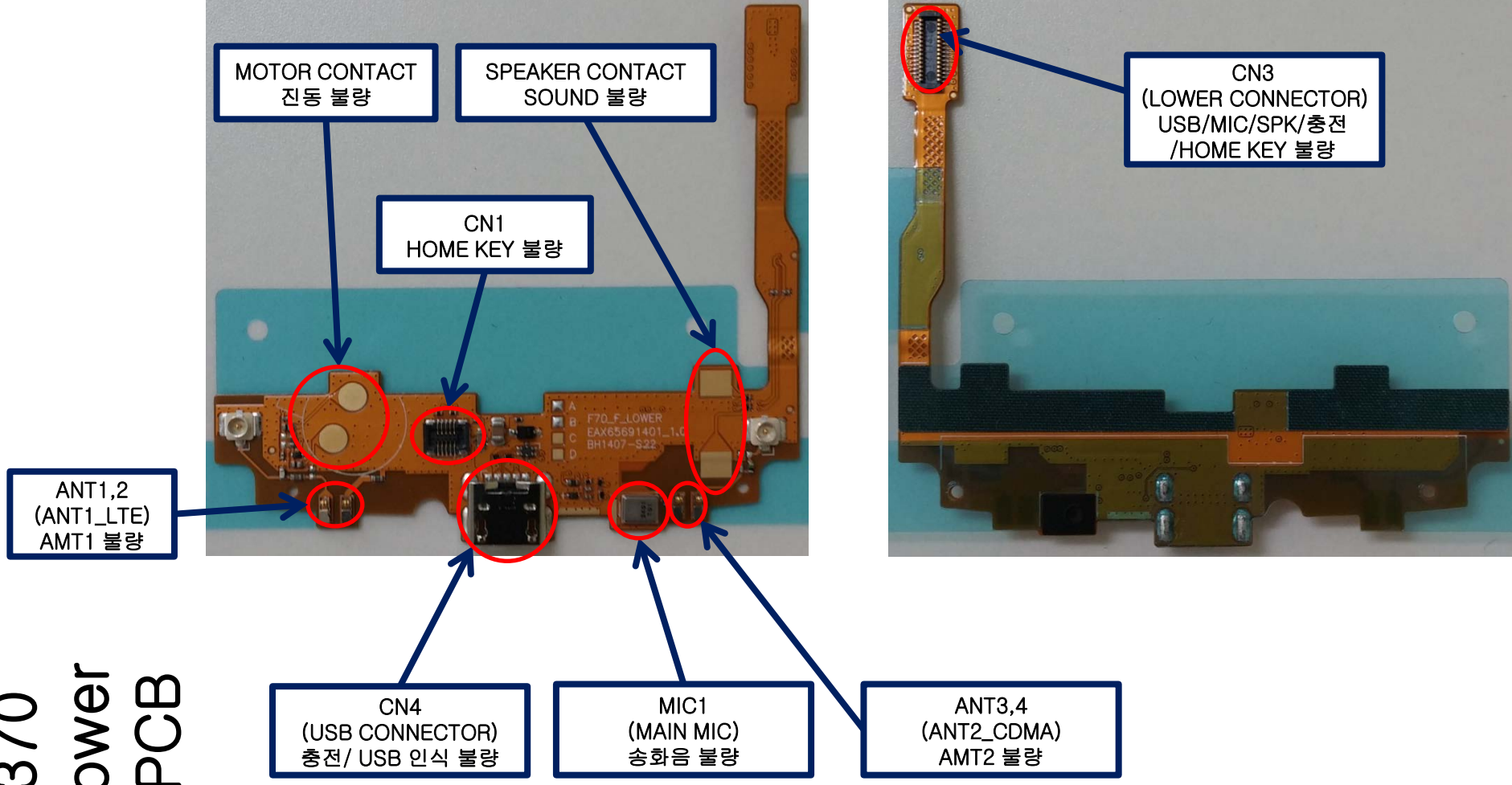
F370L

LGE Internal Use Only

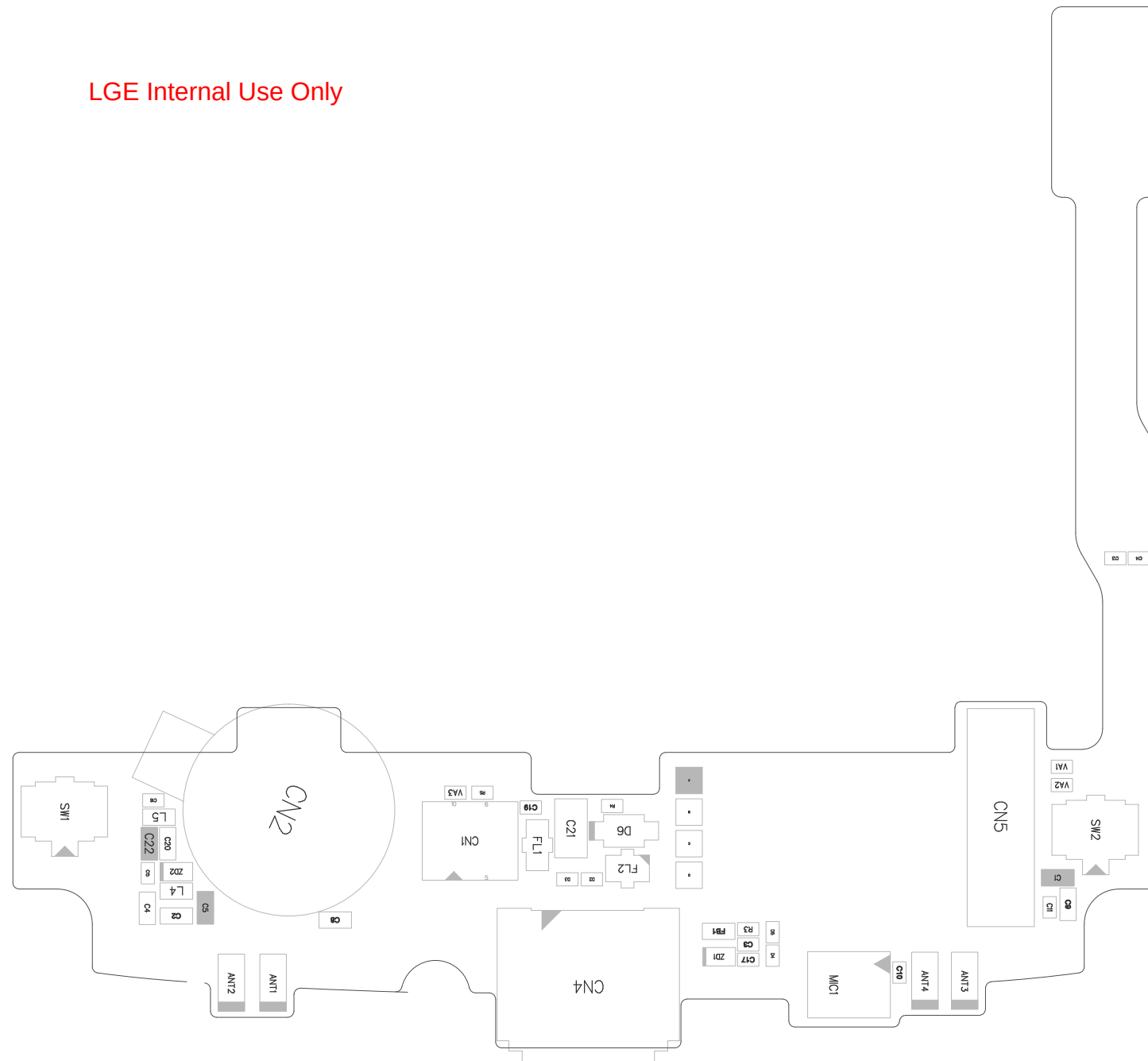


EAX65551301_1.0_D315_MAIN-BOT

F370 Lower FPCB

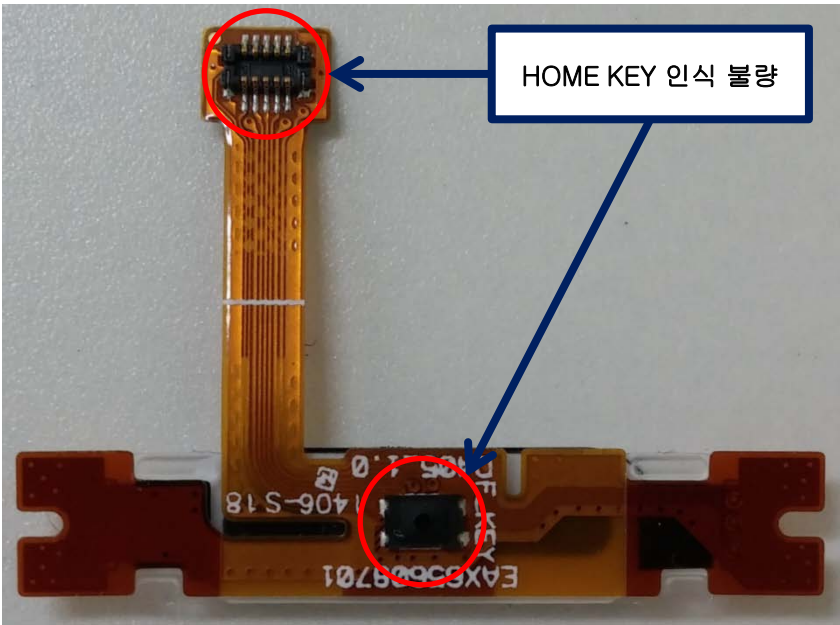
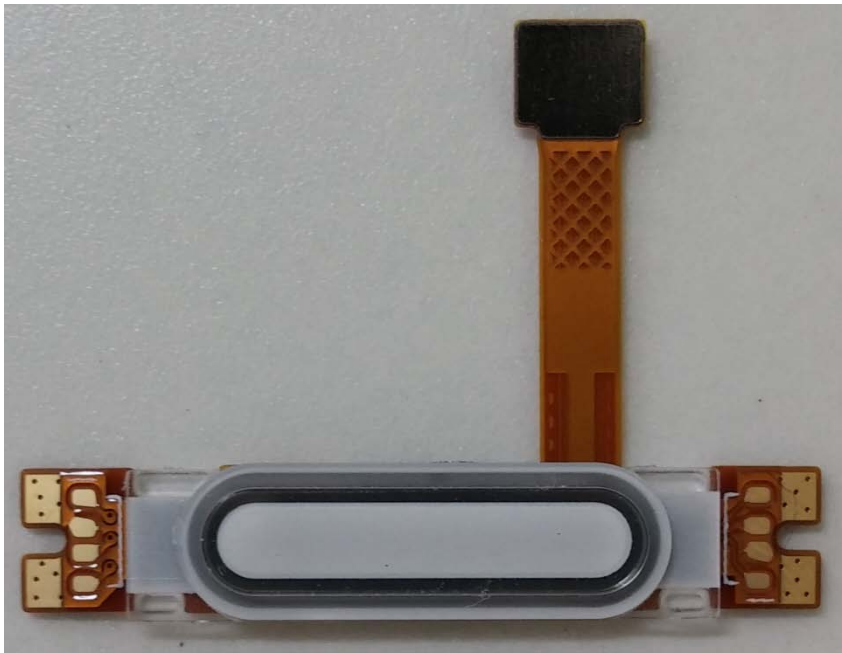


LGE Internal Use Only

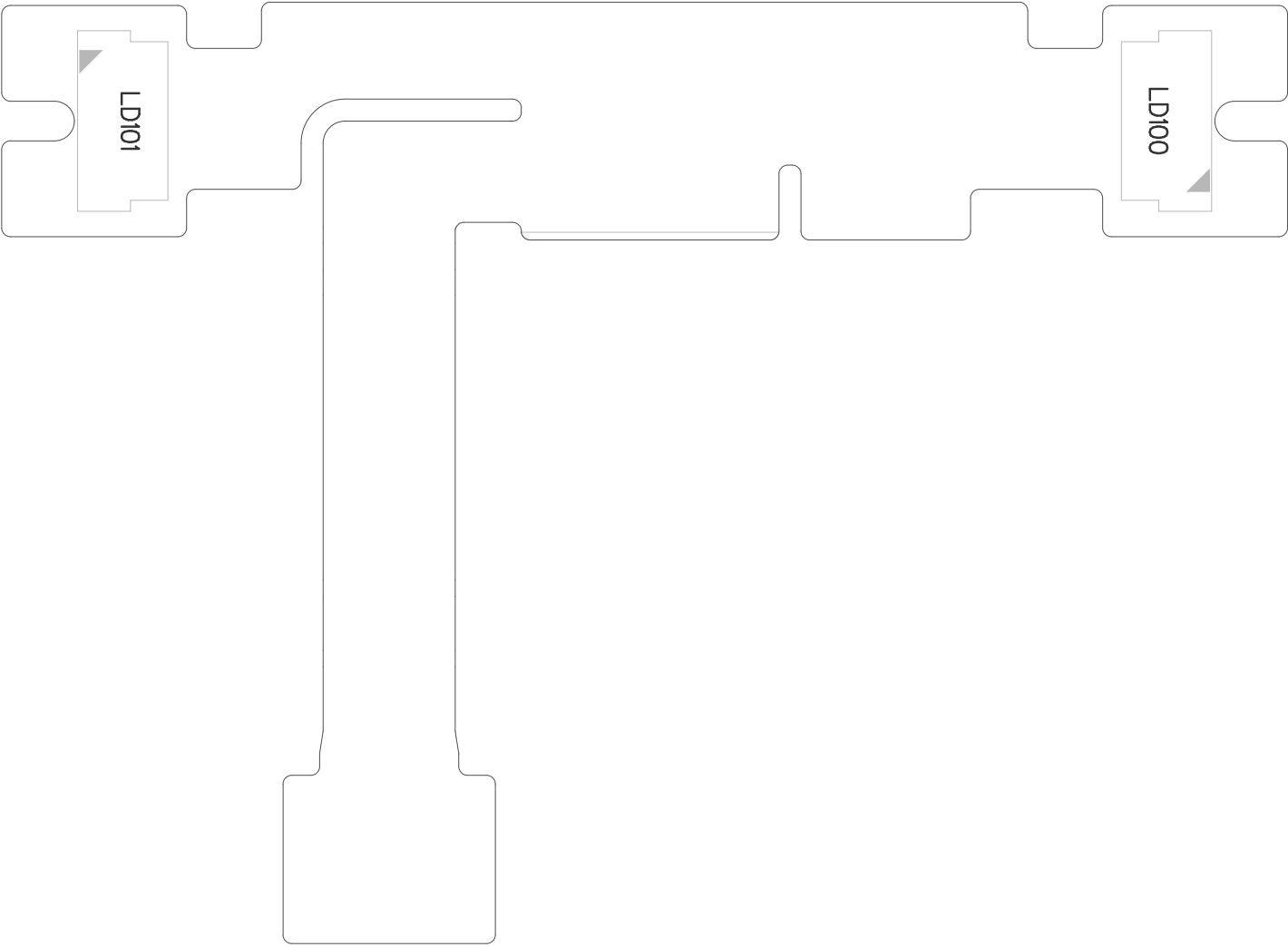


D315_F_LOWER_1.0_BOT

F370
HOME_Key
FPCB

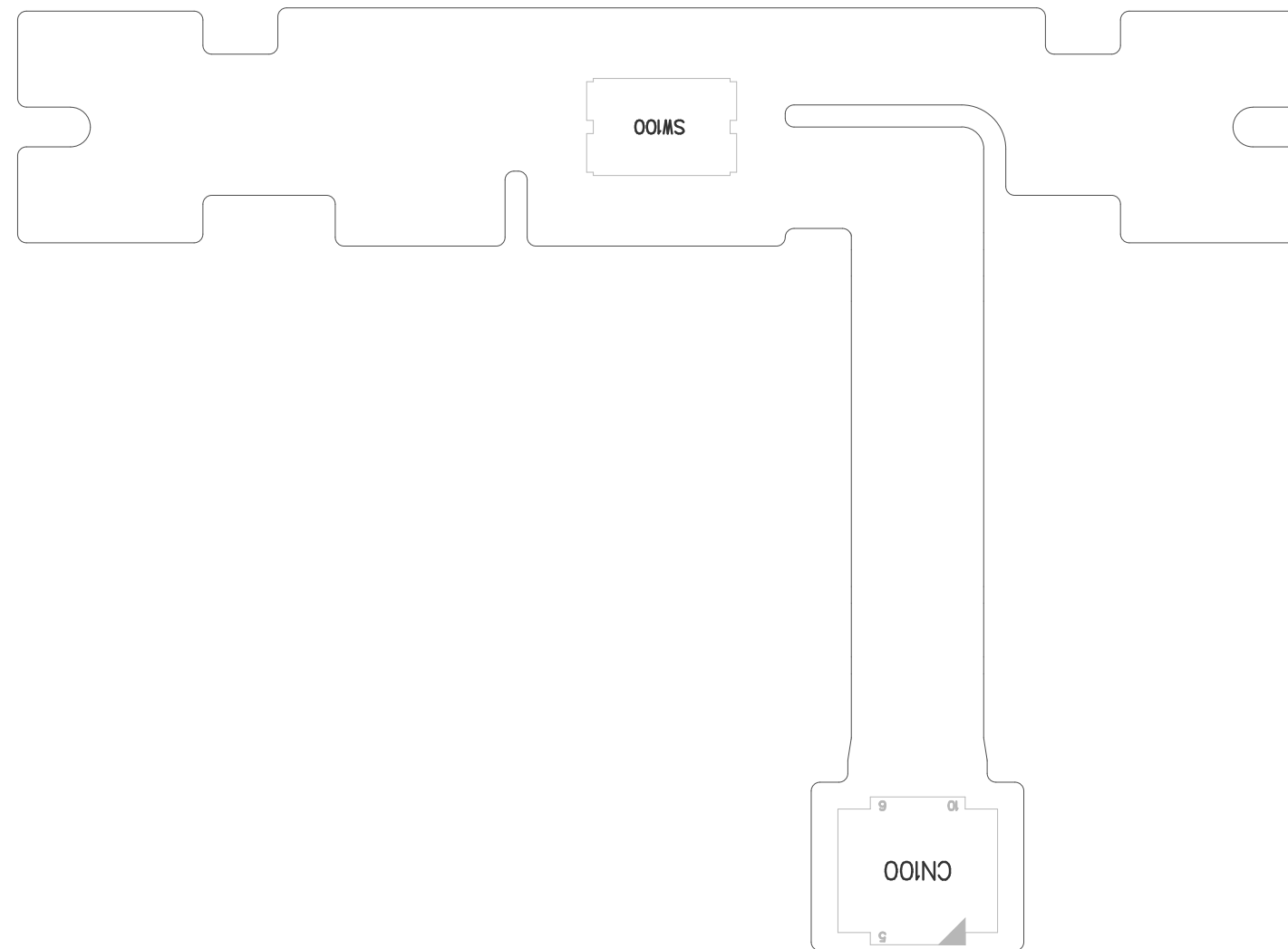


LGE Internal Use Only

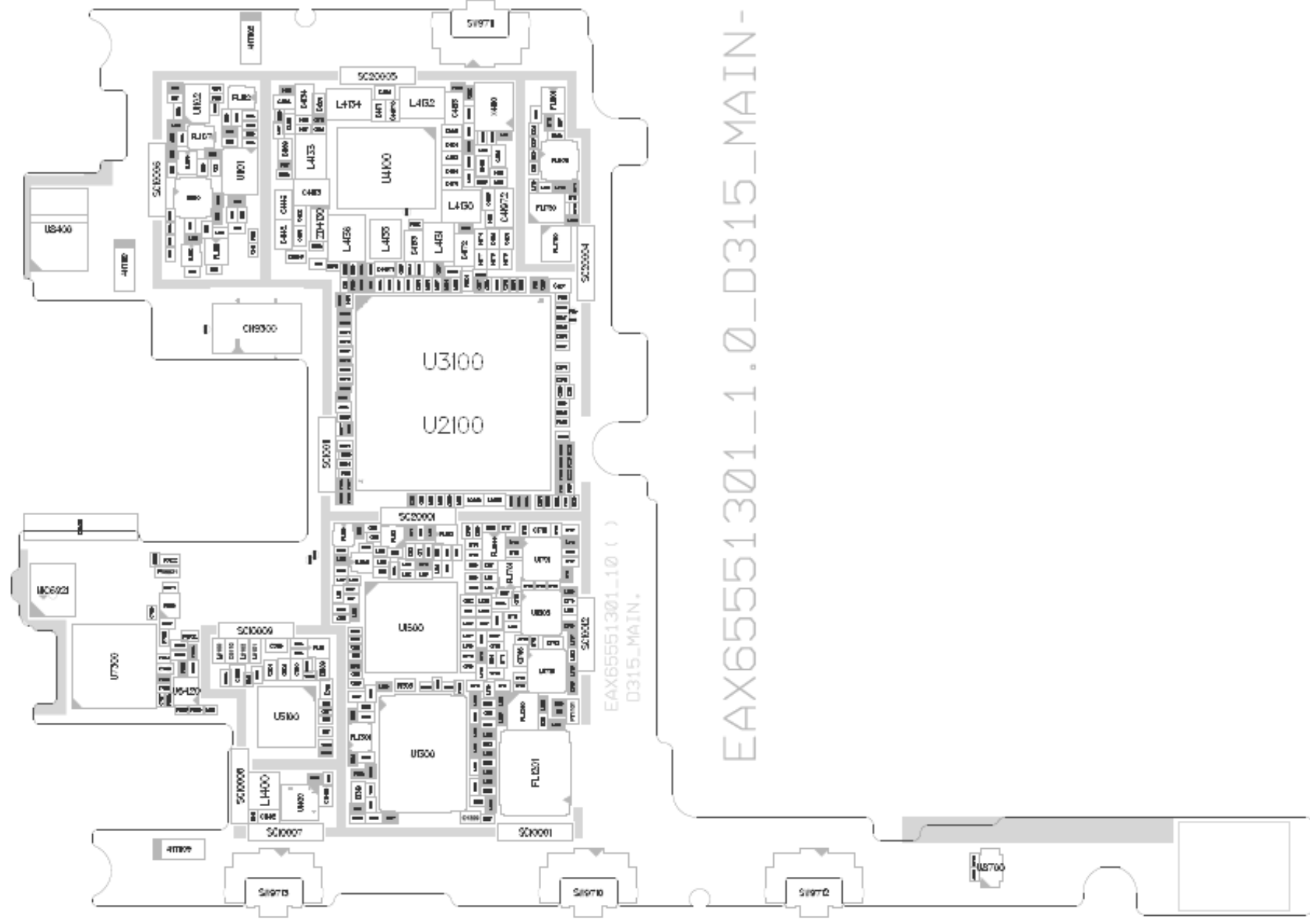


EAX65608701_1.0_D405_F-KEY_TOP

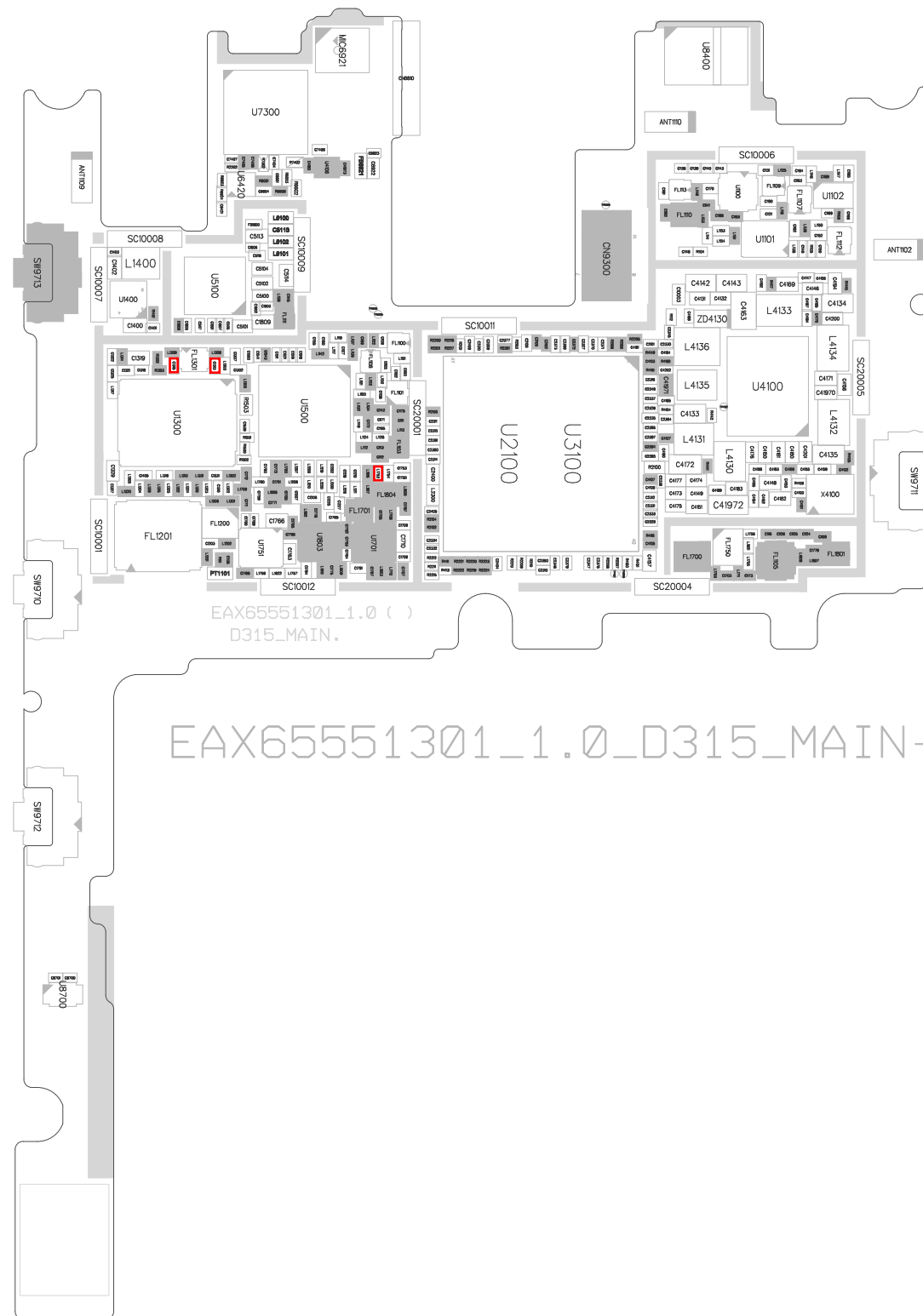
LGE Internal Use Only



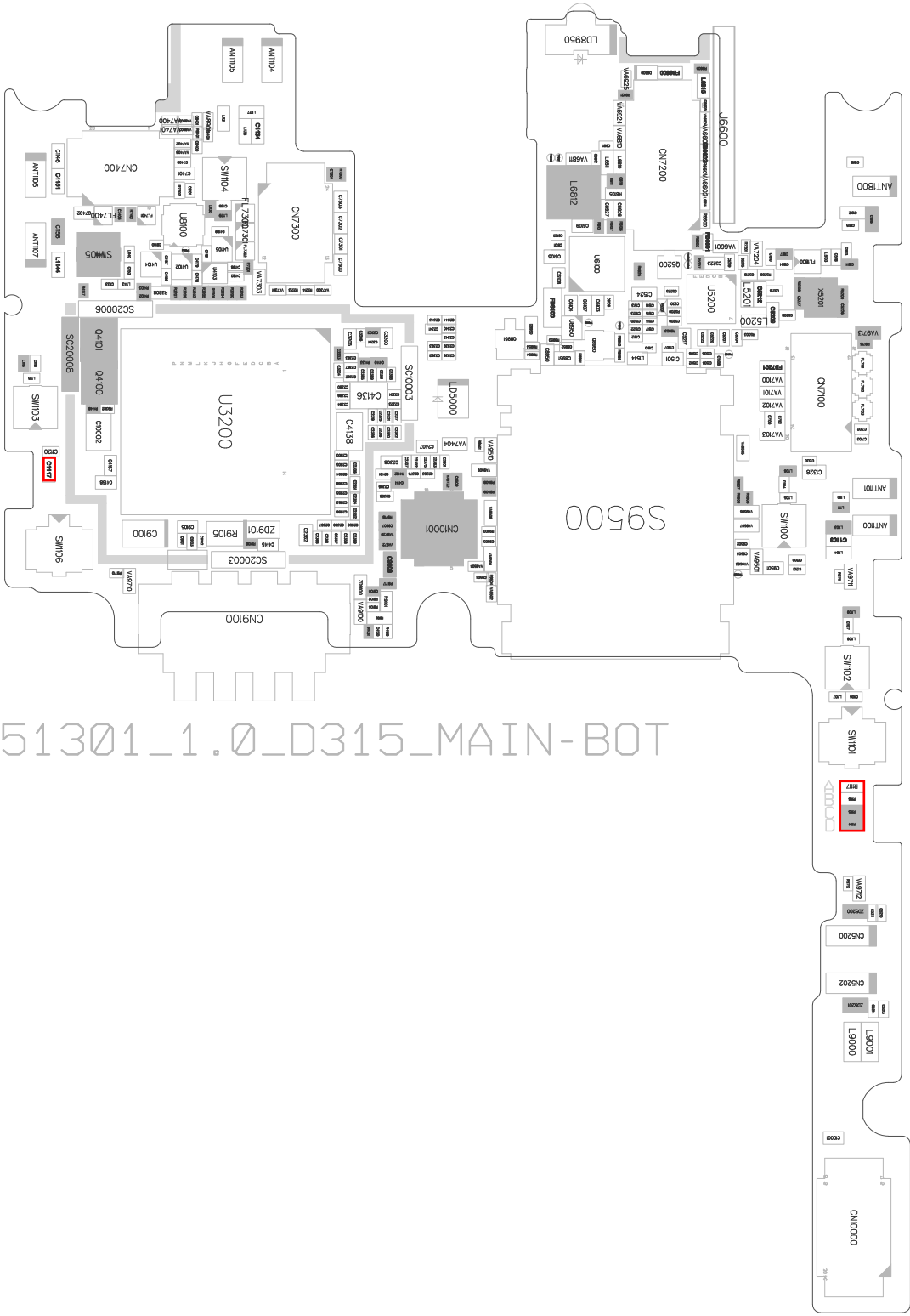
EAX65608701_1.0_D405_F-KEY_BOT



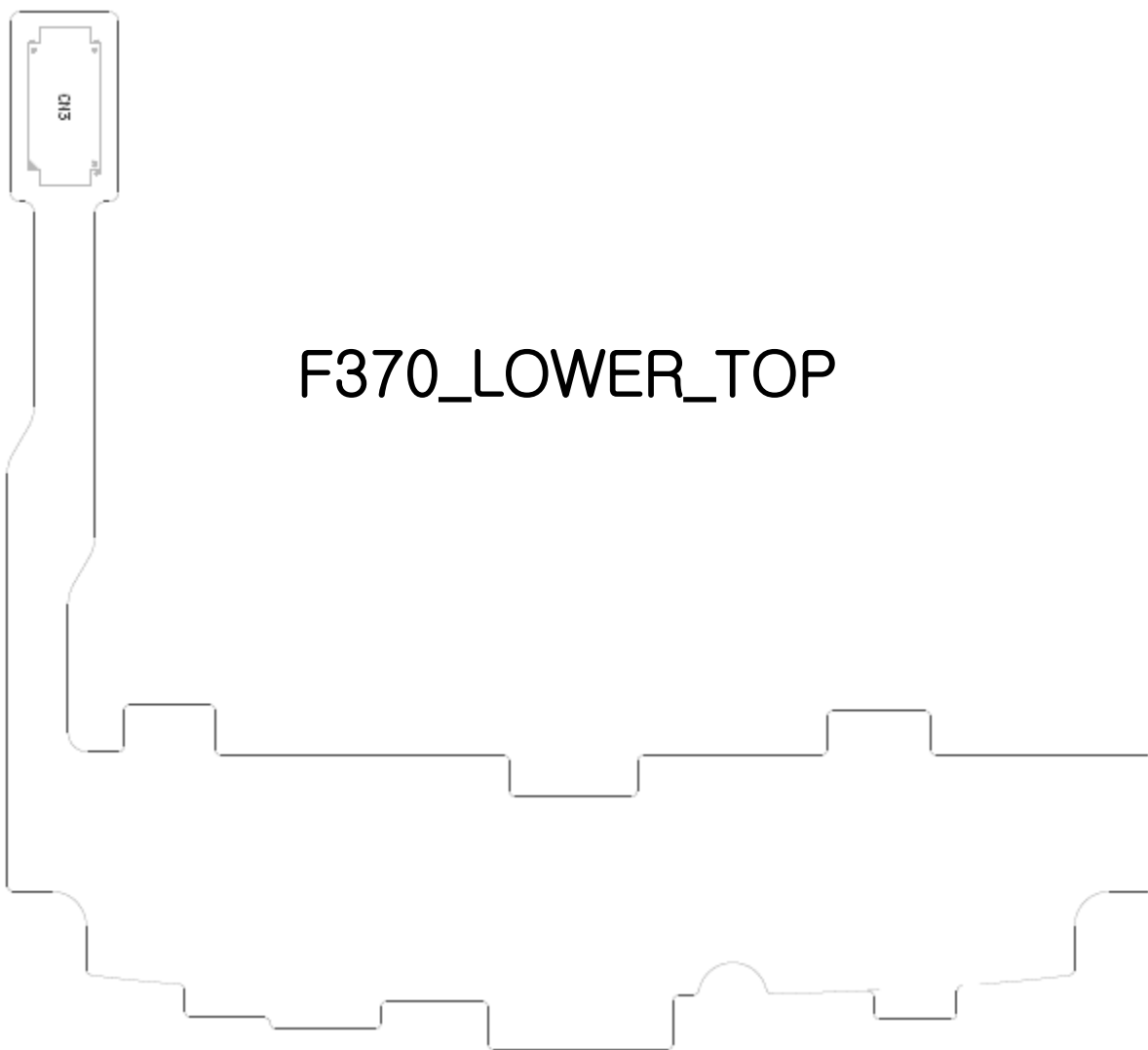
LGE Internal Use Only



LGE Internal Use Only

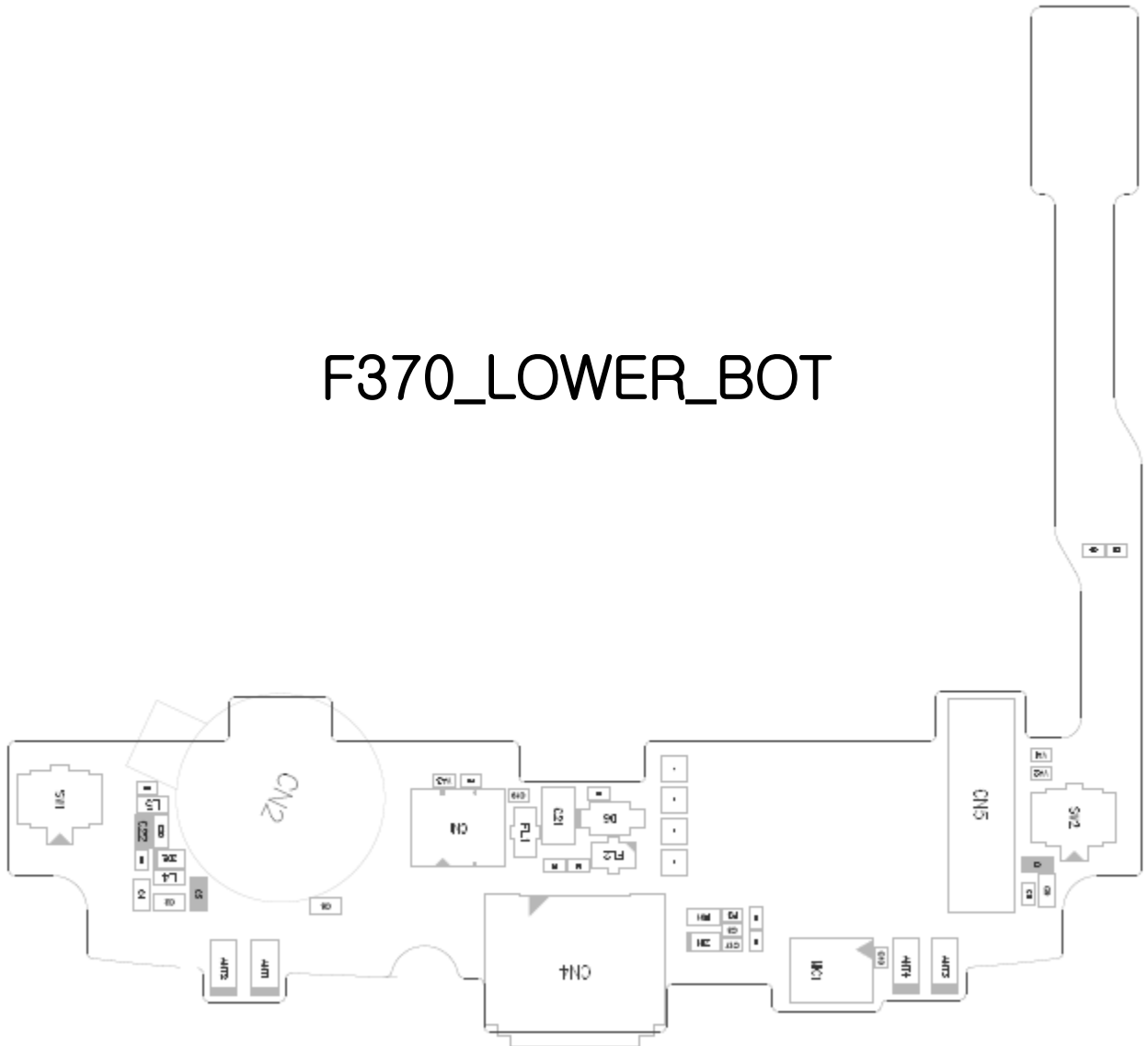


EAX65551301_1.0_D315_MAIN-BOT

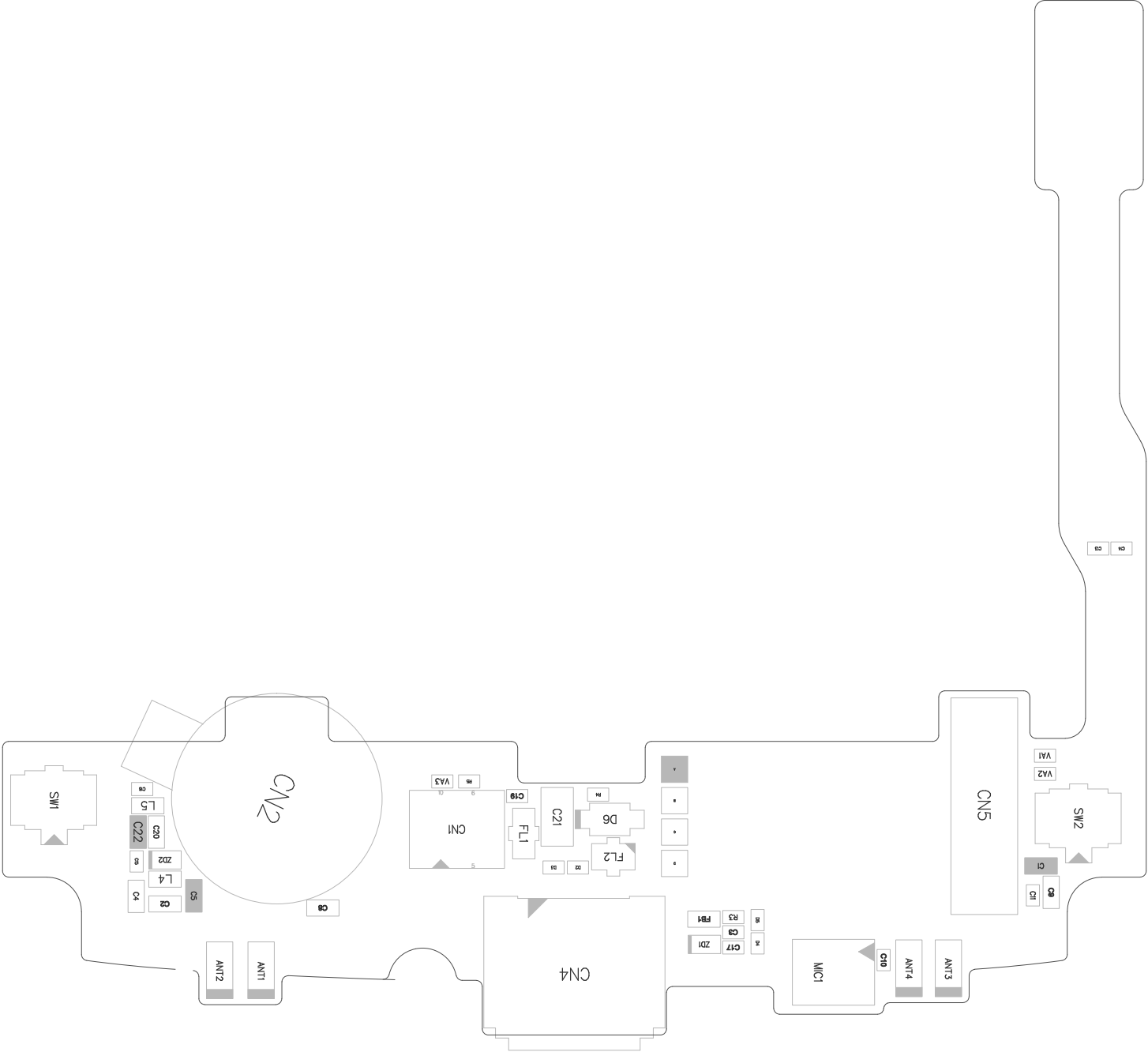


F370_LOWER_TOP

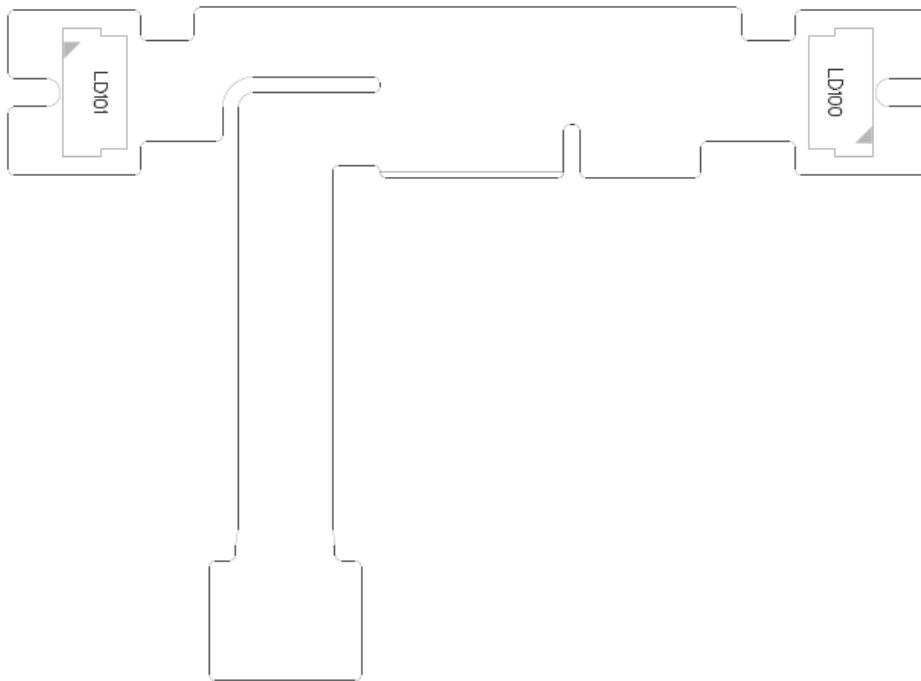
F370_LOWER_BOT



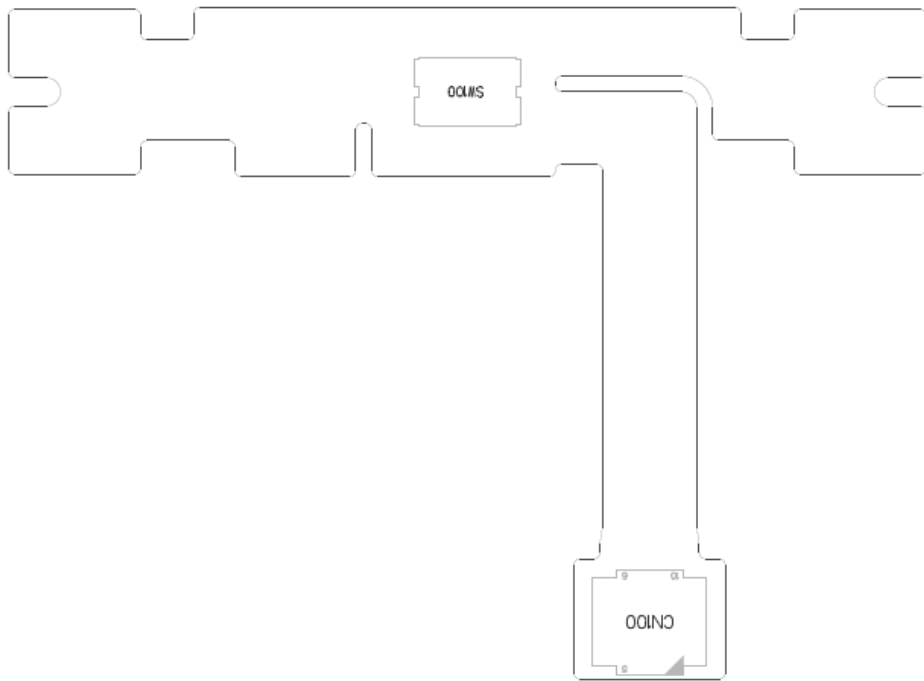
LGE Internal Use Only



D315_F_LOWER_1.0_BOT



EAX65608701_1.0_D405_F-KEY_TOP

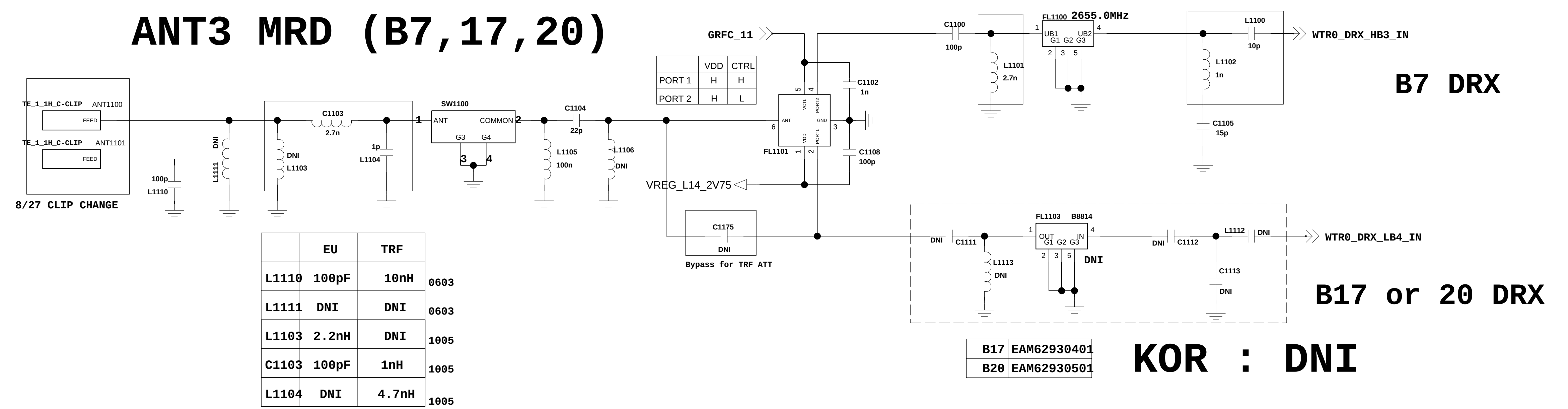


EAX65608701_1.0_D405_F-KEY_BOT

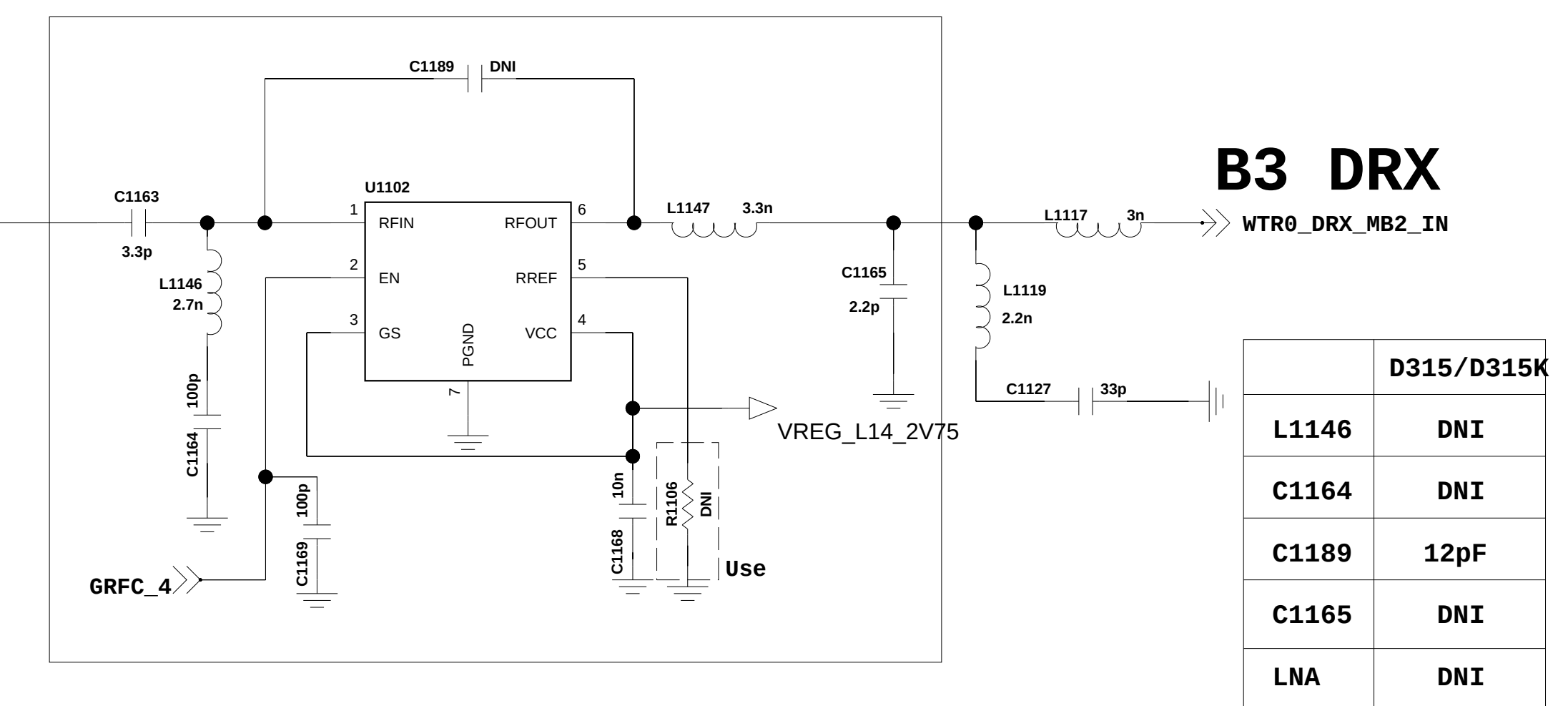
바. 회로도

Rev_0.3 Updated by TWHan 20130715 from CCDS

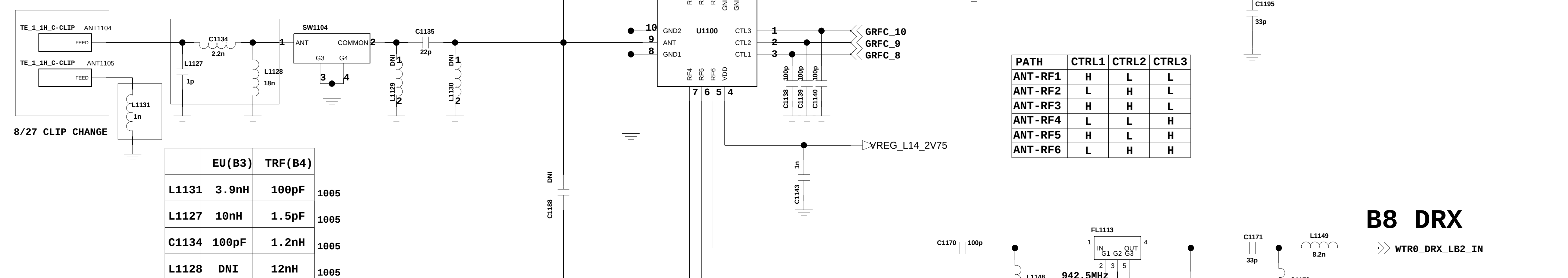
ANT3 MRD (B7, 17, 20)



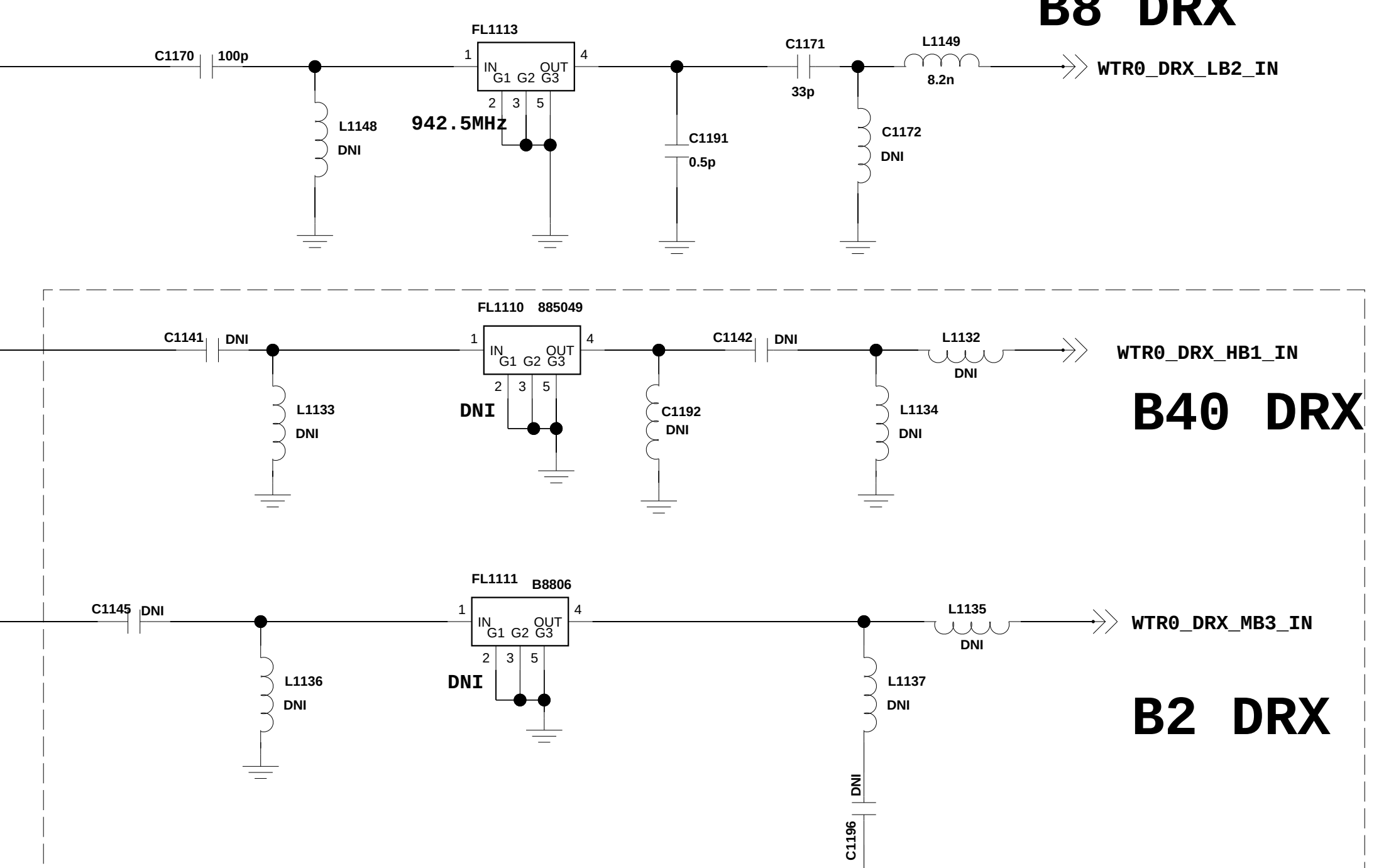
KOR : DNI



ANT4 MRD (B1/4, 2, 3, 5, 8, 40)



B8 DRX



		LG Electronics
MODEL NAME		
QWC NO	PDM NUMBER	REV
2		Rev

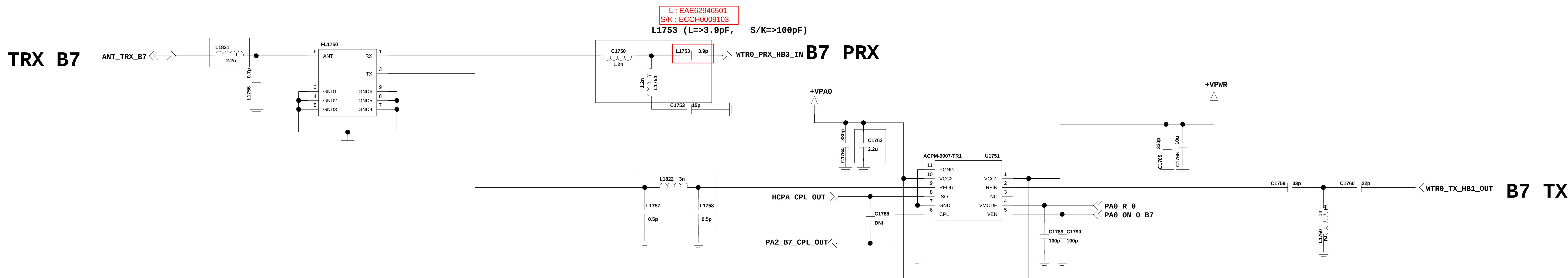
Use of LG LTE GNSS Diversity



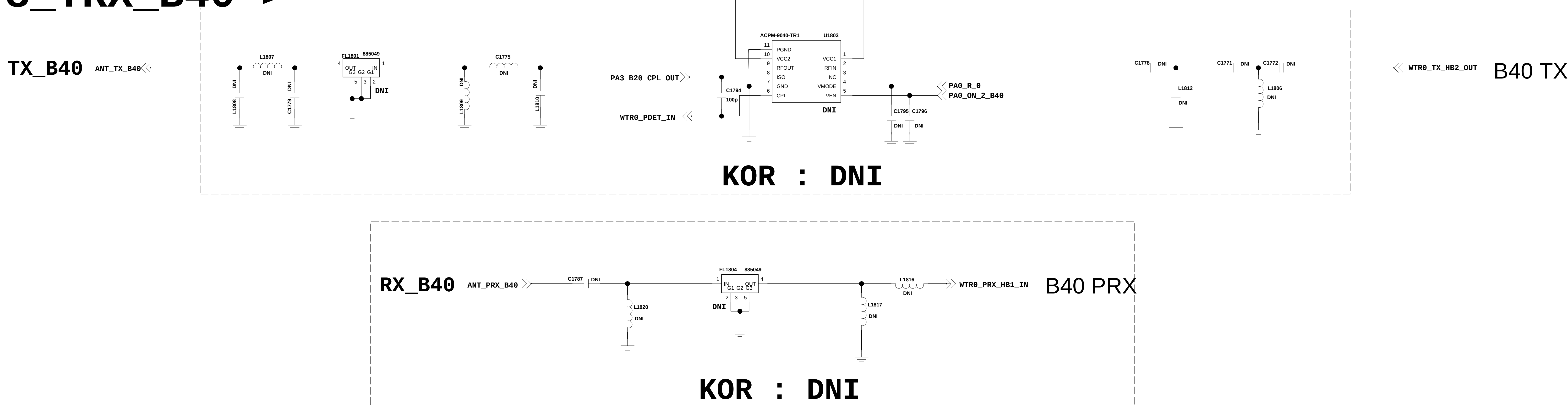
< 1-3-6-7_TRX_B7 >

Rev_0.3

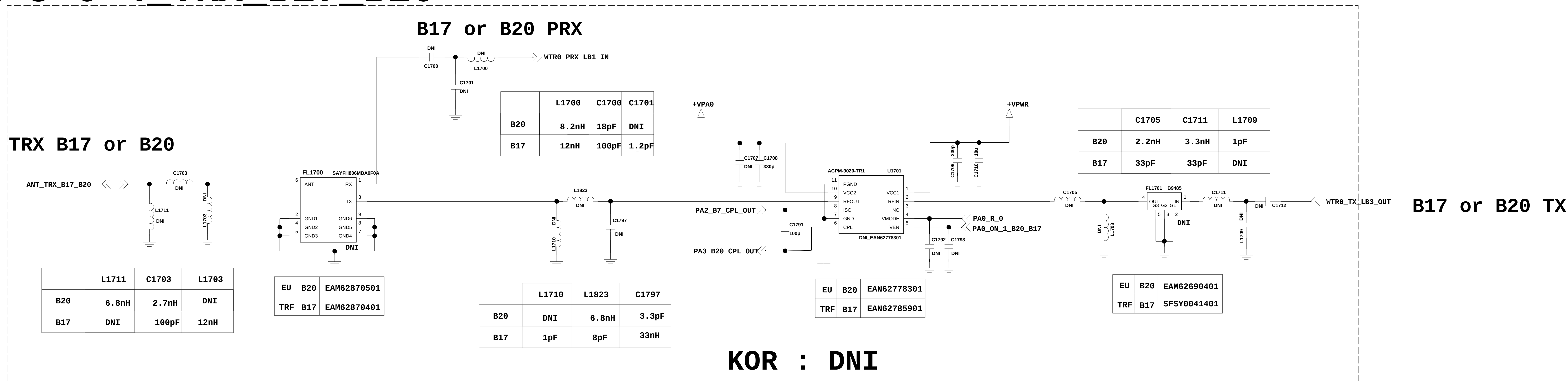
Updated by TWHan 20130715 from CCDS



< 1-3-6-8_TRX_B40 >



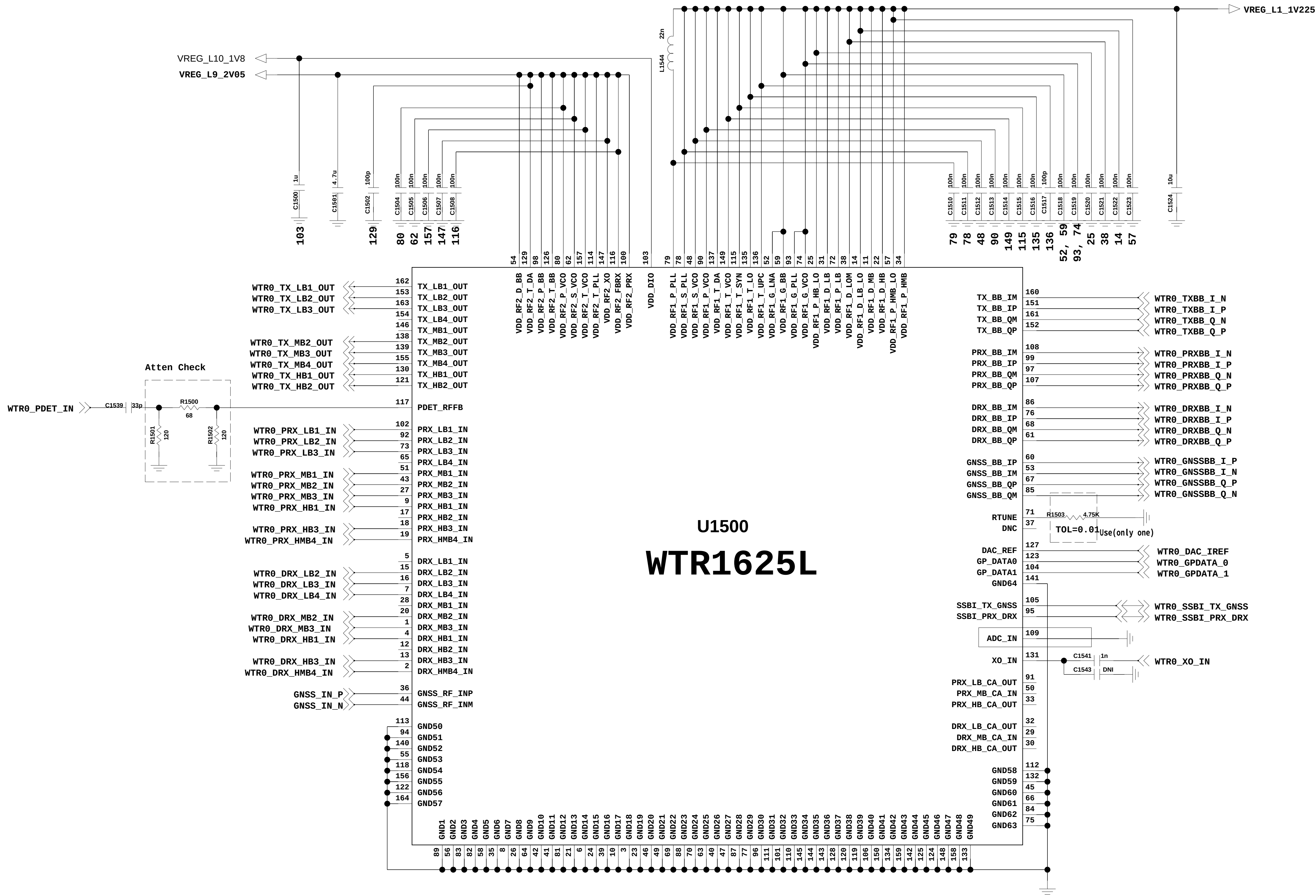
< 1-3-6-4_TRX_B17_B20 >



< 1-3-5-1_RFIC_CA_nCA_WTR1625 >

Rev_0.3

Checked by TWHan 20130715 from CCDS



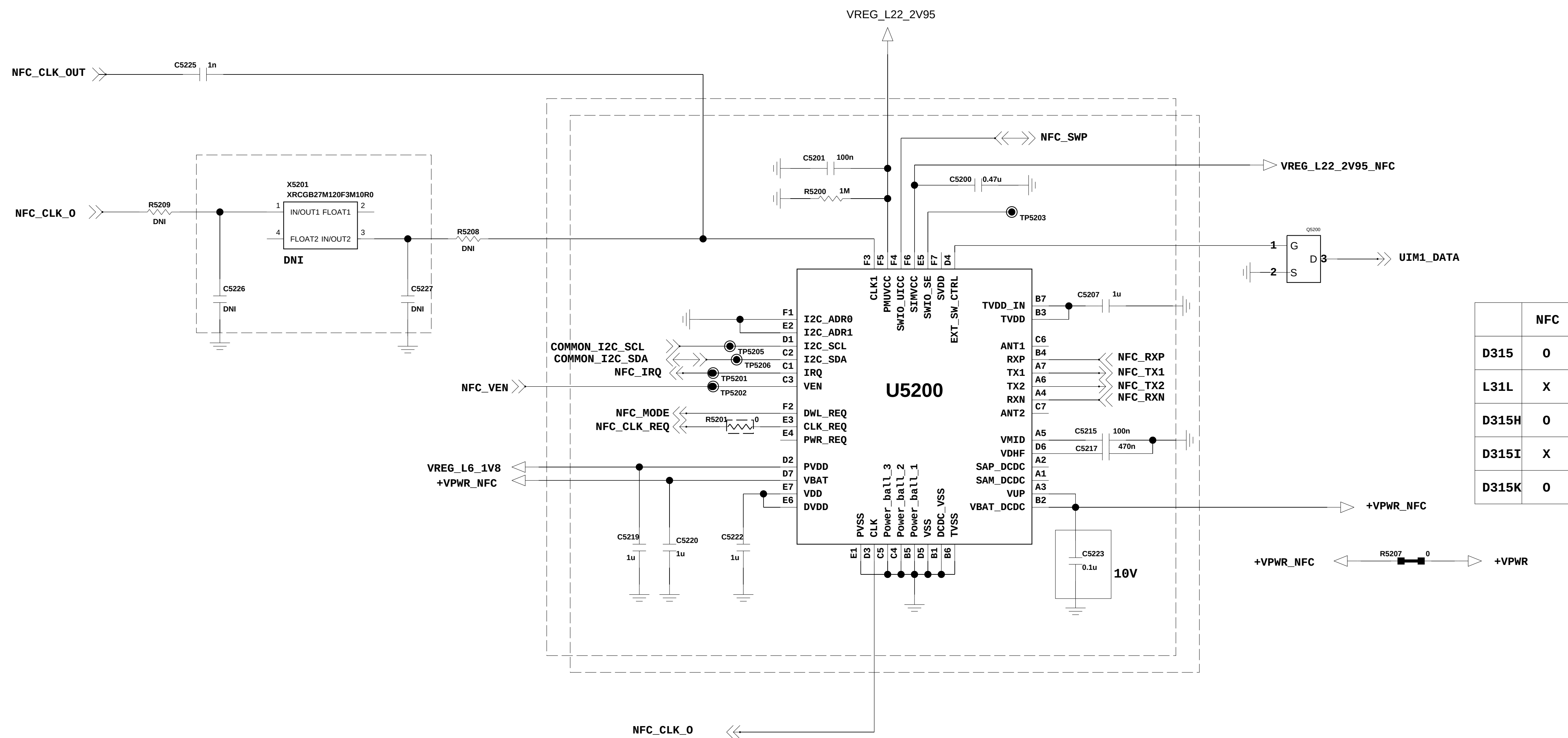
RF PORT MAP TABLE FOR WTR1625(L)+WFR2600 v01						
WTR1625 RF PORT MAPPING						
RF PORT	KR	DCM, KDDI	ATT_TMUS_SPC	EU GLOBAL	VZW_USC	
TX_LB1_OUT	GSM_LB	GSM_LB	B5/26, BC0/10	B5/8, BC0	B5, B8	BC0
TX_LB2_OUT			GSM_LB		GSM_LB	
TX_LB3_OUT	B17			B20		
TX_LB4_OUT	B5, B8	B6/18/19, BC0	B17		B12/13	
TX_MB1_OUT		B11/21		B34/39	B4	
TX_MB2_OUT	GSM_HB	GSM_HB	GSM_HB	GSM_HB	GSM_HB	
TX_MB3_OUT	B1, B2	B1, BC6	B1/2/25, BC1	B1/2	B1, B2	BC1
TX_MB4_OUT	B3, B4		B3/4	B3		
TX_HB1_OUT	B7	B41	B7	B7		
TX_HB2_OUT			B41	B38/40		
PRX_LB1_IN	850, B5	B6/18/19, BC0	B29	B20		
PRX_LB2_IN	900, B8	900		900, B8	B8, C900	
PRX_LB3_IN		850, B5/26, BC0/10	B29	1050, B5, BC0	B5, C850	BC0
PRX_LB4_IN	B17		B17		B12/13	
PRX_MB1_IN	B2	B11/21	B2/25, BC1	B2	B4	
PRX_MB2_IN	GSM_HB	GSM_HB	GSM_HB	GSM_HB	G1800	
PRX_MB3_IN			B3	B3	B2, G1900	BC1
PRX_HB1_IN		B41	B41	B38/40		
PRX_HB2_IN				B34/39		
PRX_HB3_IN	B7		B7	B7		
PRX_HMB4_IN		B1, BC6	B1/4	B1	B1	
DRX_LB1_IN	B8		B29	B20		
DRX_LB2_IN	B5	B18/19, BC0		B8		
DRX_LB3_IN			B5/26		B5	BC0
DRX_LB4_IN	B17	B11/21	B2/25, BC1		B12/13	
DRX_MB1_IN					B4	
DRX_MB2_IN				B39		
DRX_MB3_IN			B3	B3	B2	BC1
DRX_HB1_IN			B41	B38		
DRX_HB2_IN				B40		
DRX_HB3_IN	B7		B7	B7		
DRX_HMB4_IN		B1, BC6	B1/4	B1		

WFR1620 RF PORT MAPPING				
RF PORT	KR	DCM, KDDI	ATT_TMUS_SPC	EU GLOBAL
PRX_MB1_IN			B2/25, BC1	
PRX_MB2_IN	B3			B3
PRX_MB3_IN	B1/4			
DRX_MB1_IN			B2/25, BC1	
DRX_MB2_IN	B3			
DRX_MB3_IN	B1/4			

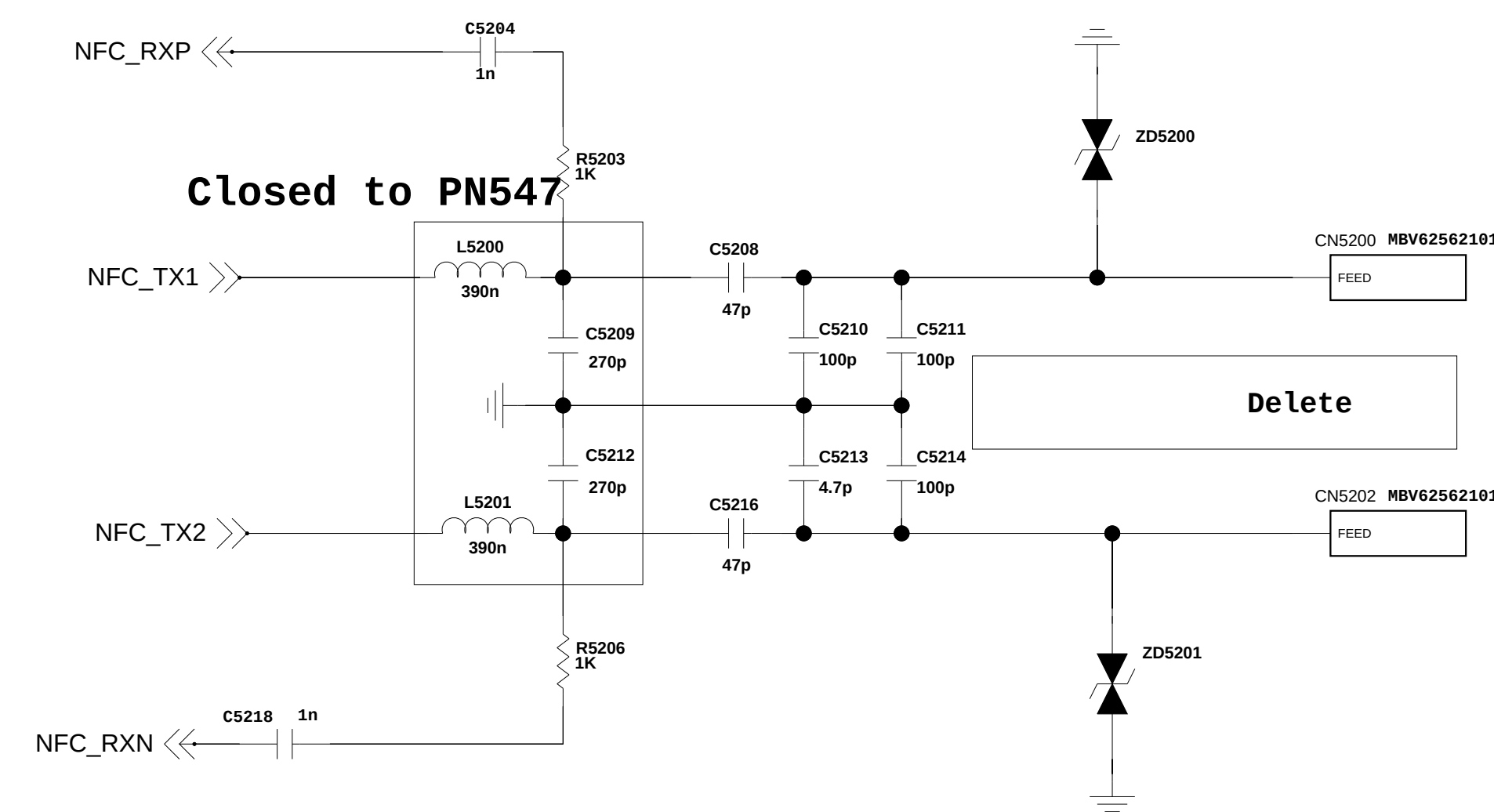
<5-2-1-4_NFC_PN547>

Modified 20130709 by Taiwoong Han. The value size changed from Platform

<5-2-1-4_NFC_PN547> Rev_0.3



NFC Antenna



	NFC
D315	0
L31L	X
D315H	0
D315I	X
D315K	0

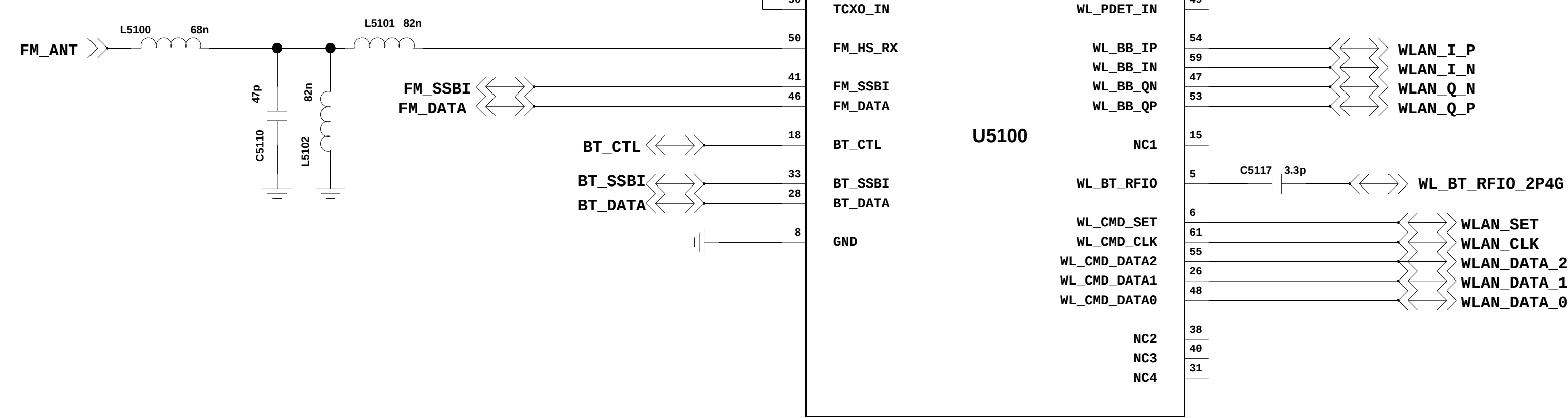
<5-1-1-4> BT/WiFi Combo_WCN3620

REV.0.3

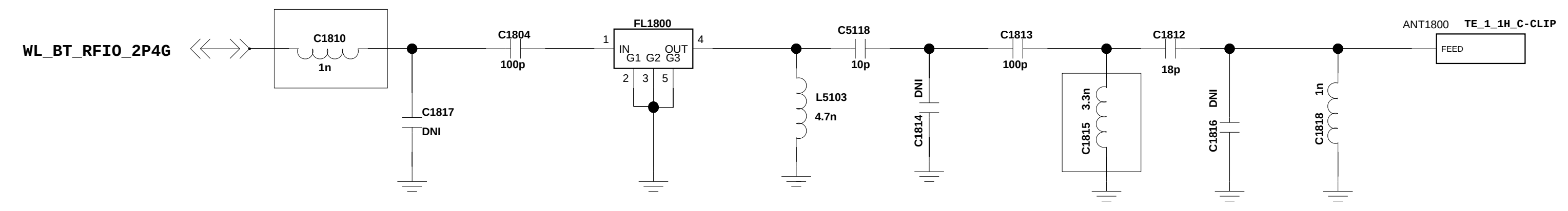
CHECK!!
POWER/GND

RF/CONTROL

Isolated GND



RF Filter

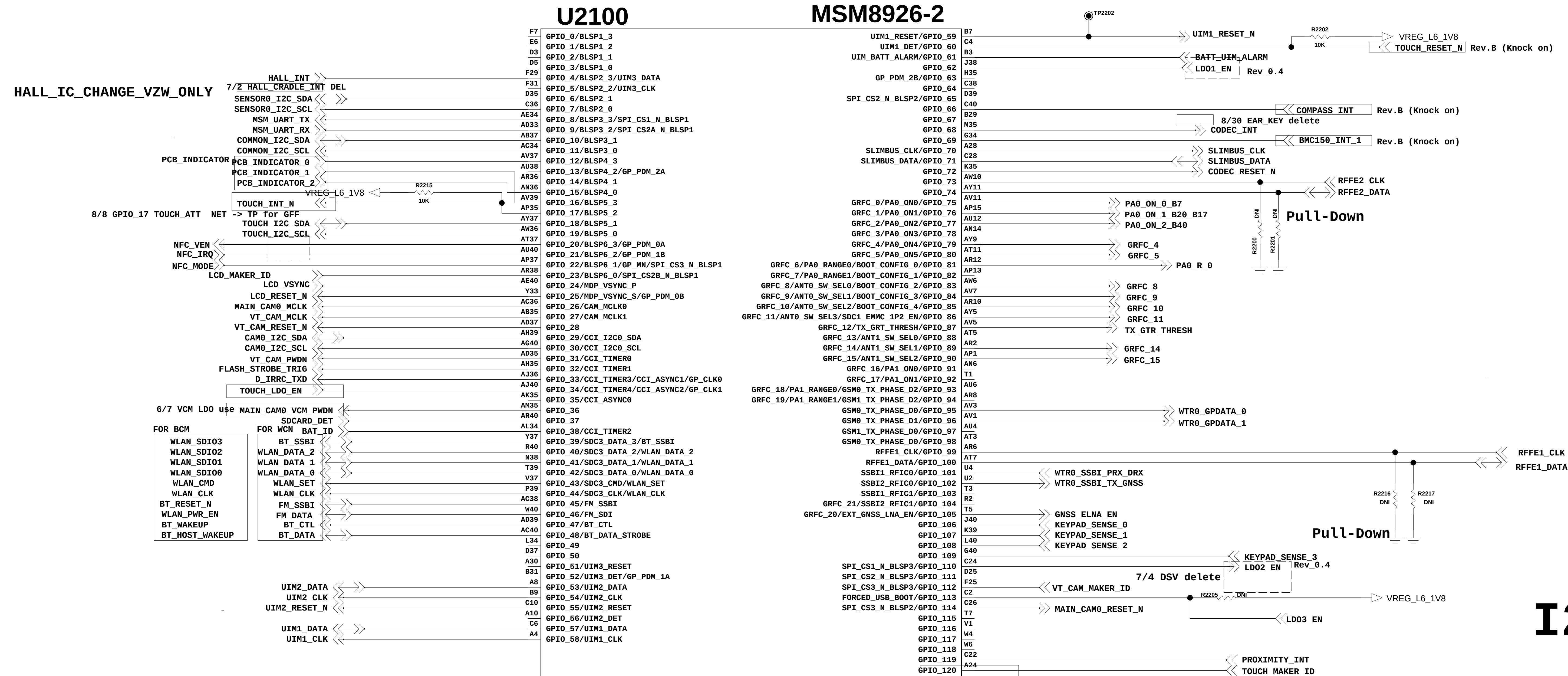


<2-1-3-3-2_MSM8926_GPIO>

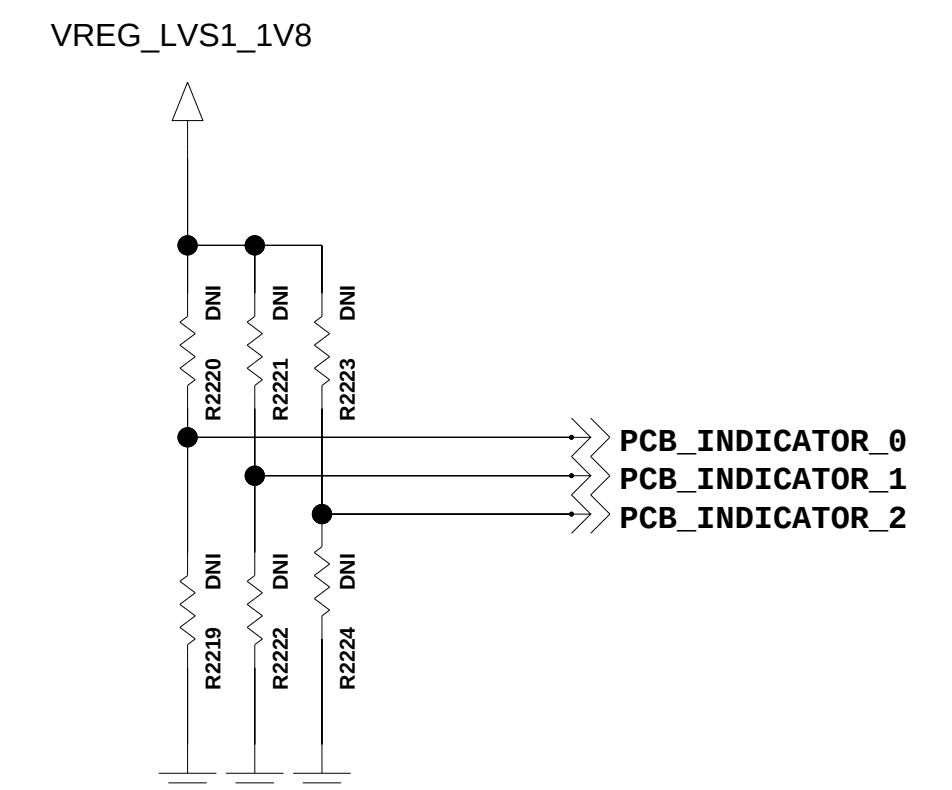
Rev_0.3

U2100

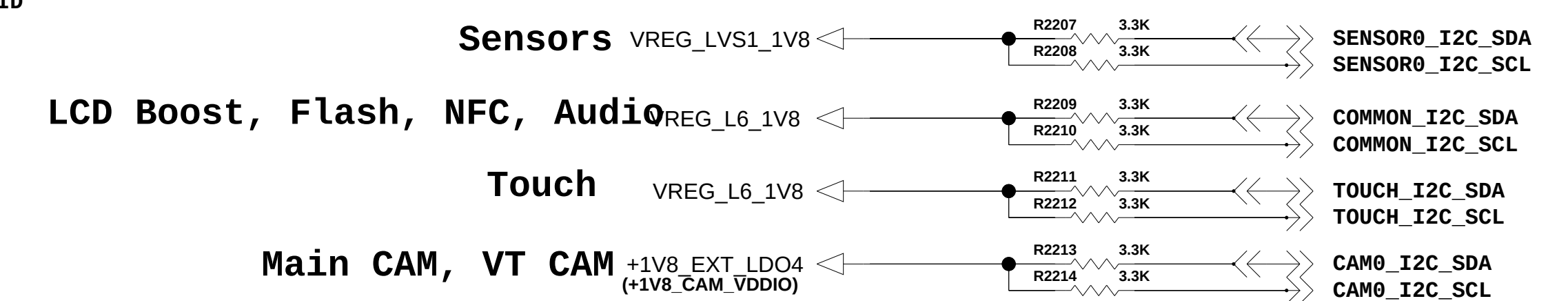
MSM8926-2

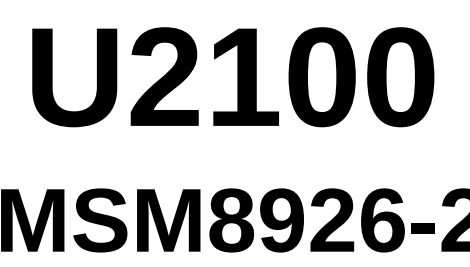


PCB_Indicator



I2C Pull-Up





<2-1-3-3-4_MSM8926_GND_NC>

Rev_0.3

FOR_WCN3620

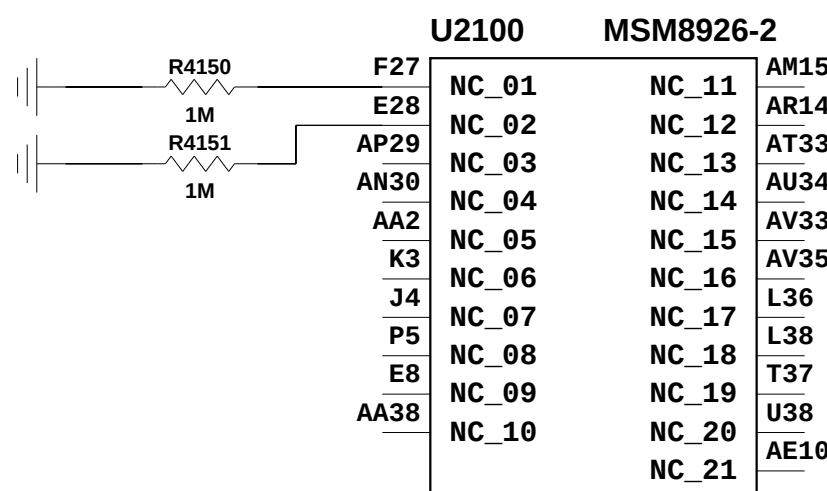
Connect K37 to GND when using WCN3620.

R2400, R2401 Deleted

Pin K37 pin name must be changed to WCN_XO

U2100

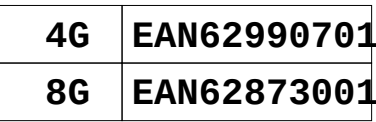
MSM8926-2



Rev_0.3



KOR : BOM (EAN62873001)

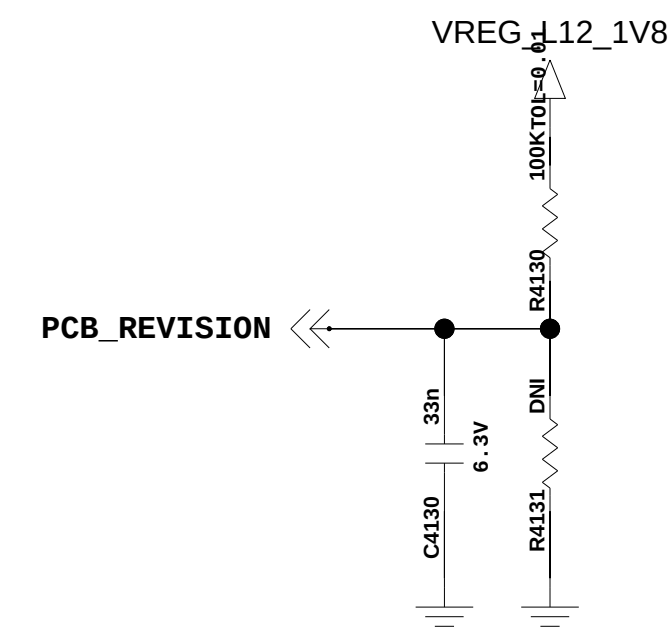


PCB REVISION

BACK_UP_BATT

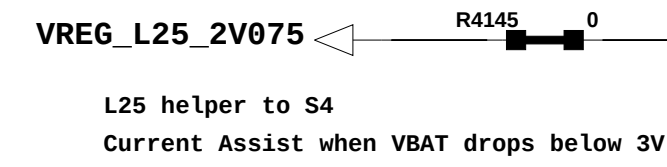
< 4-1-3-1_PMIC_PM8926_DATA >

Rev_0.3

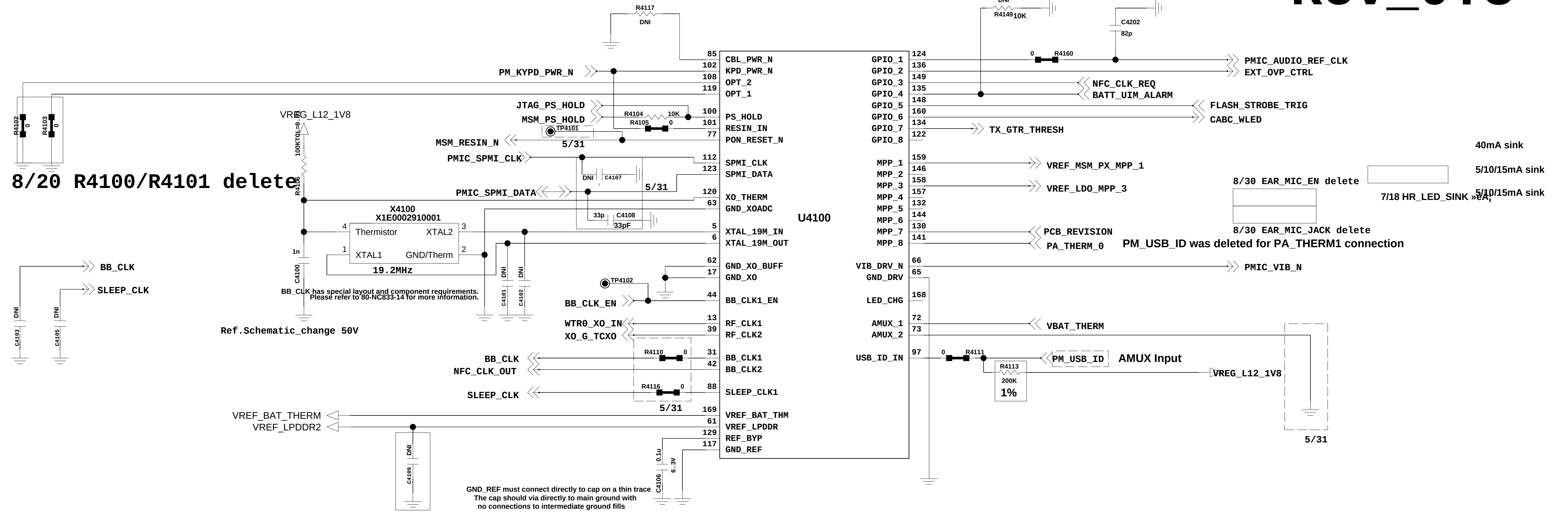


Rev	R4130	R4131	
0	100K	20K	0.300
A	100K	30K	0.415
B	100K	43K	0.541
C	100K	68K	0.729
D	100K	100K	0.900
E	100K	180K	1.157
1.0	100K	DNI	1.800
1.1	DNI	100K	0.000

Back_Up_Batt Deleted

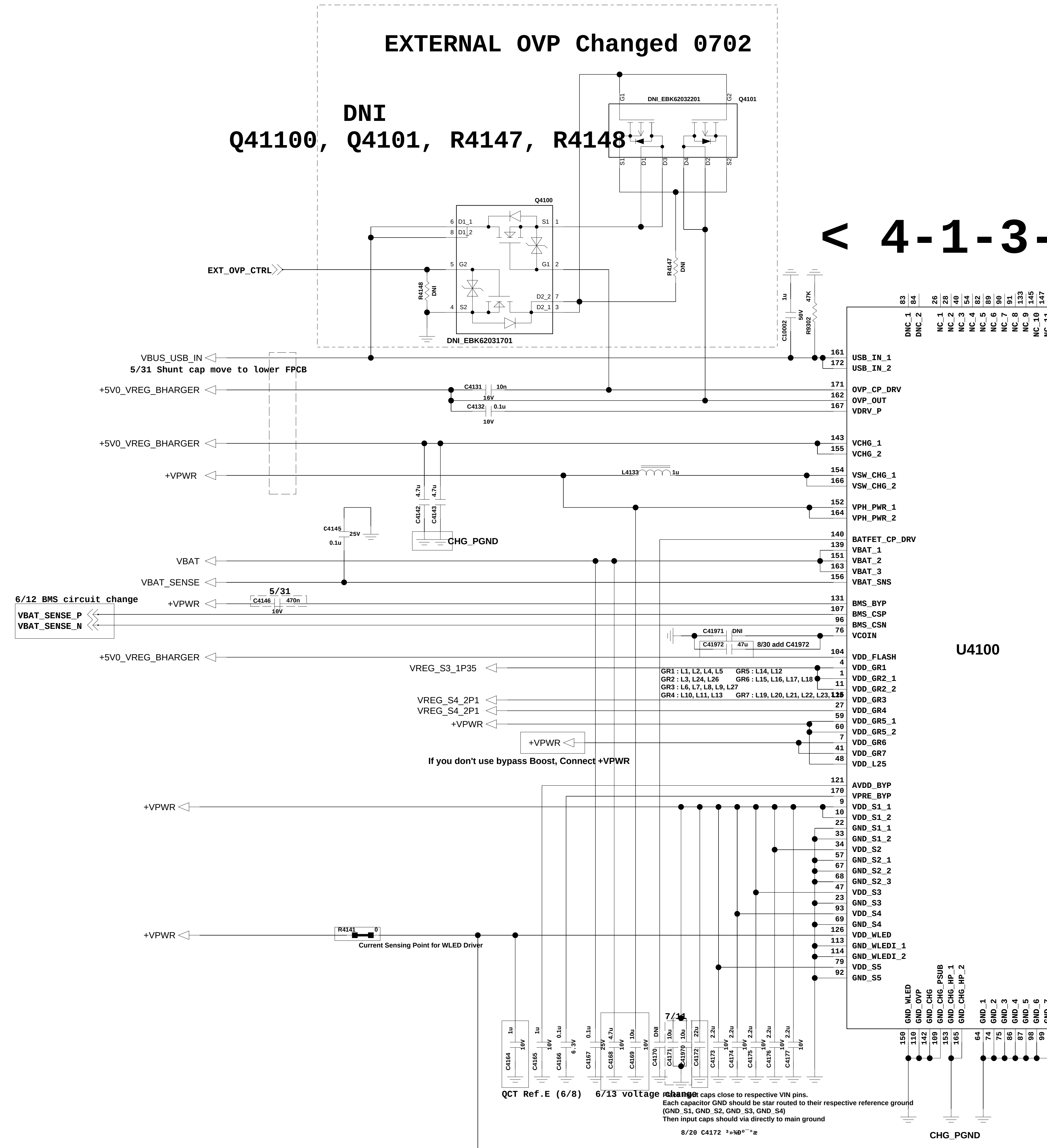


L25 helper to S4
Current Assist when VBAT drops below 3V

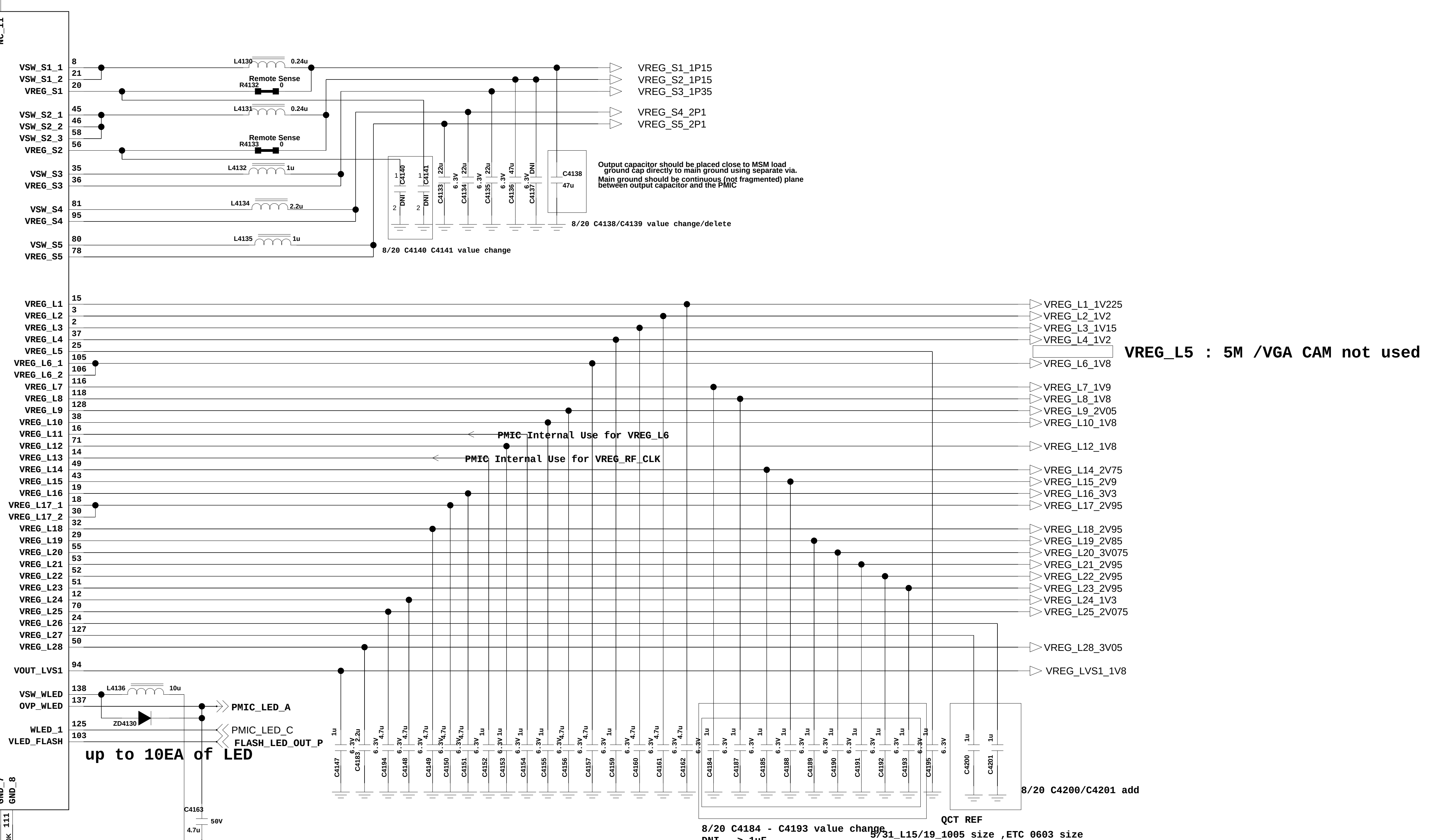


EXTERNAL OVP Changed 0702

DNI
Q41100, Q4101, R4147, R4148



< 4-1-3-2_PMIC_PM8926_POWER >

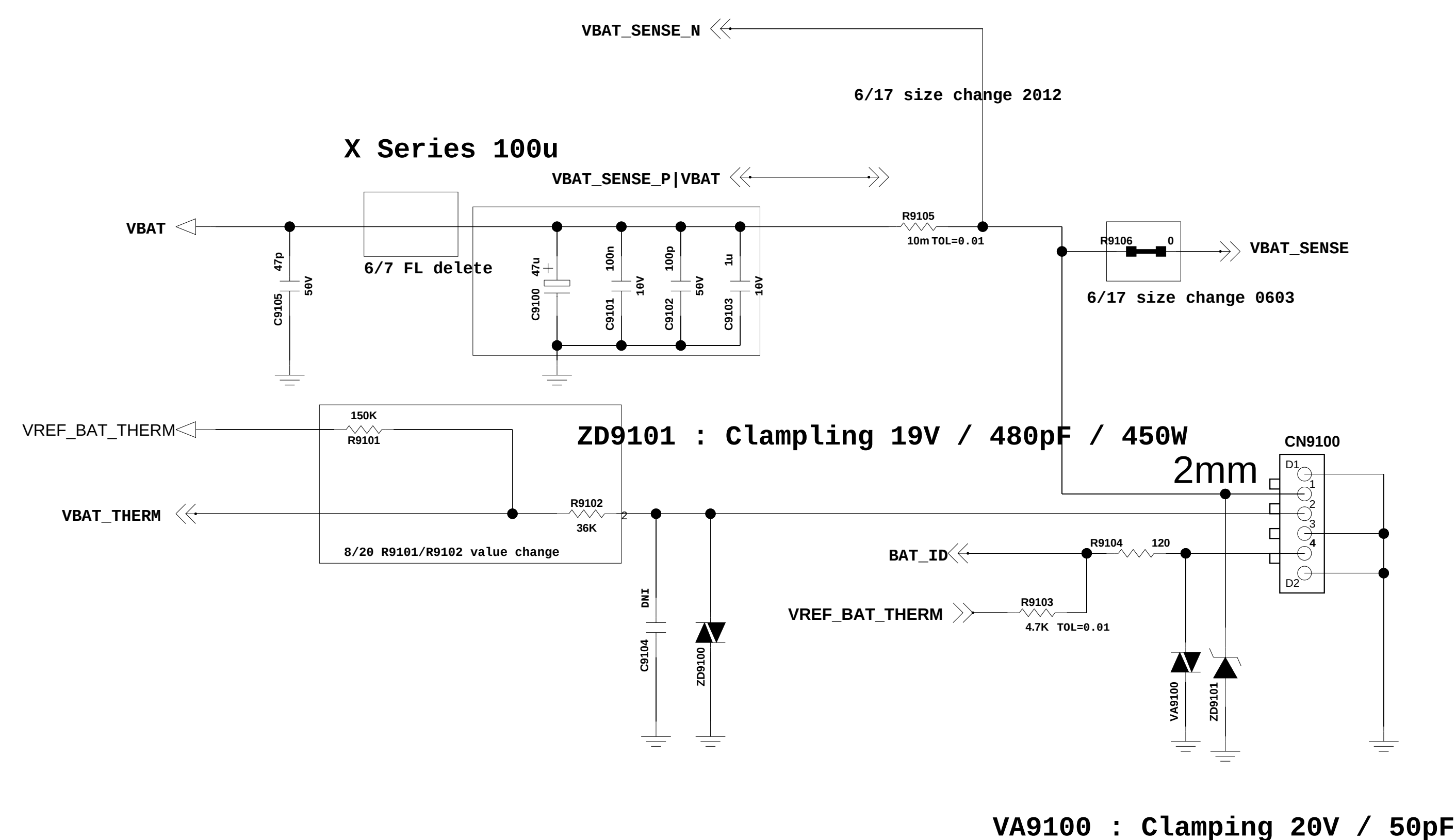


QCT_Check_List

LGE Internal Use Only

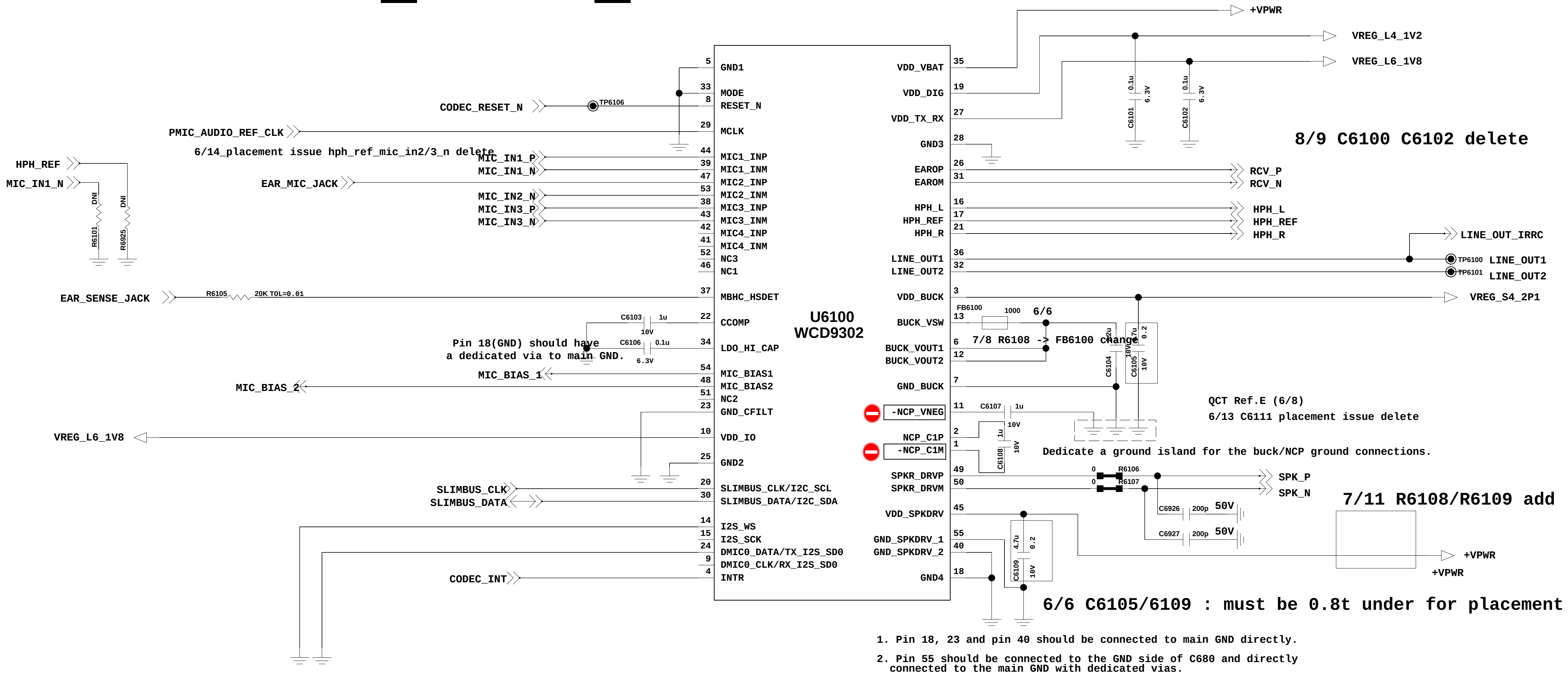
Rev_0.3

<9-1-2_Battery_CNT_4P>

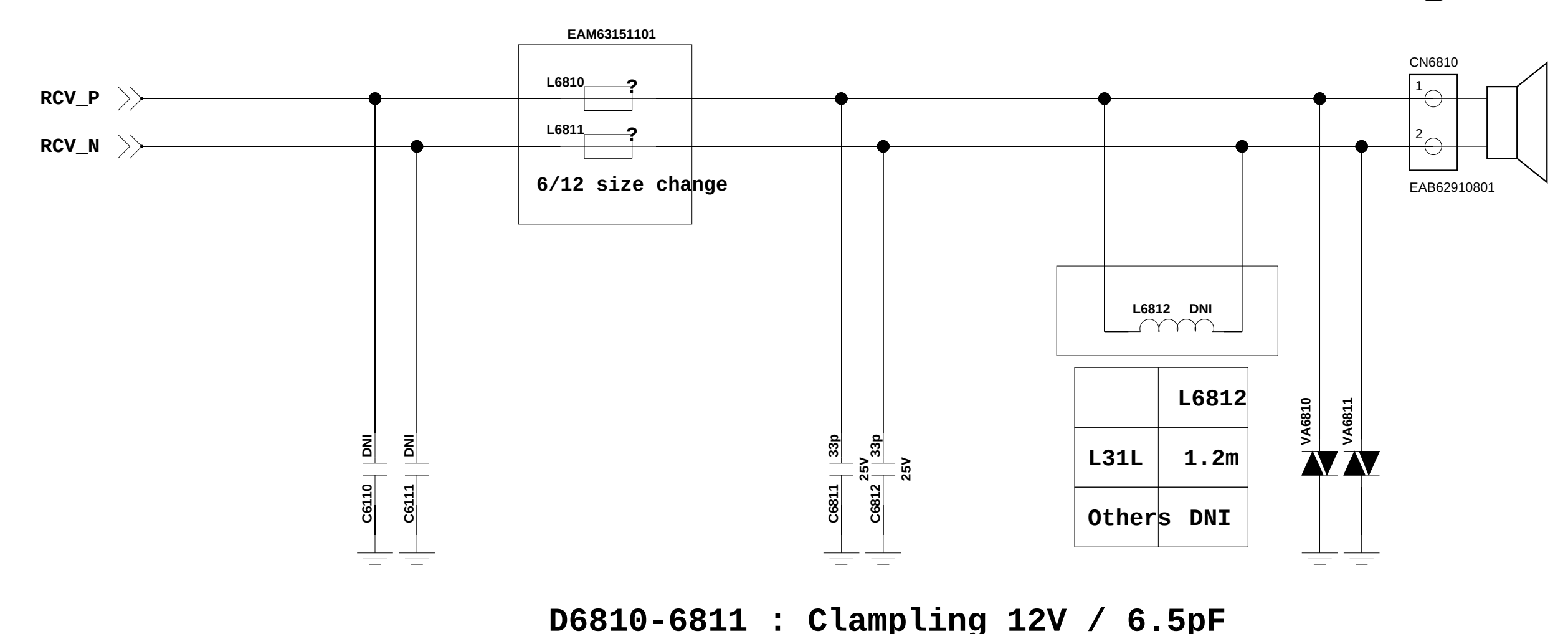


LGE Internal Use Only

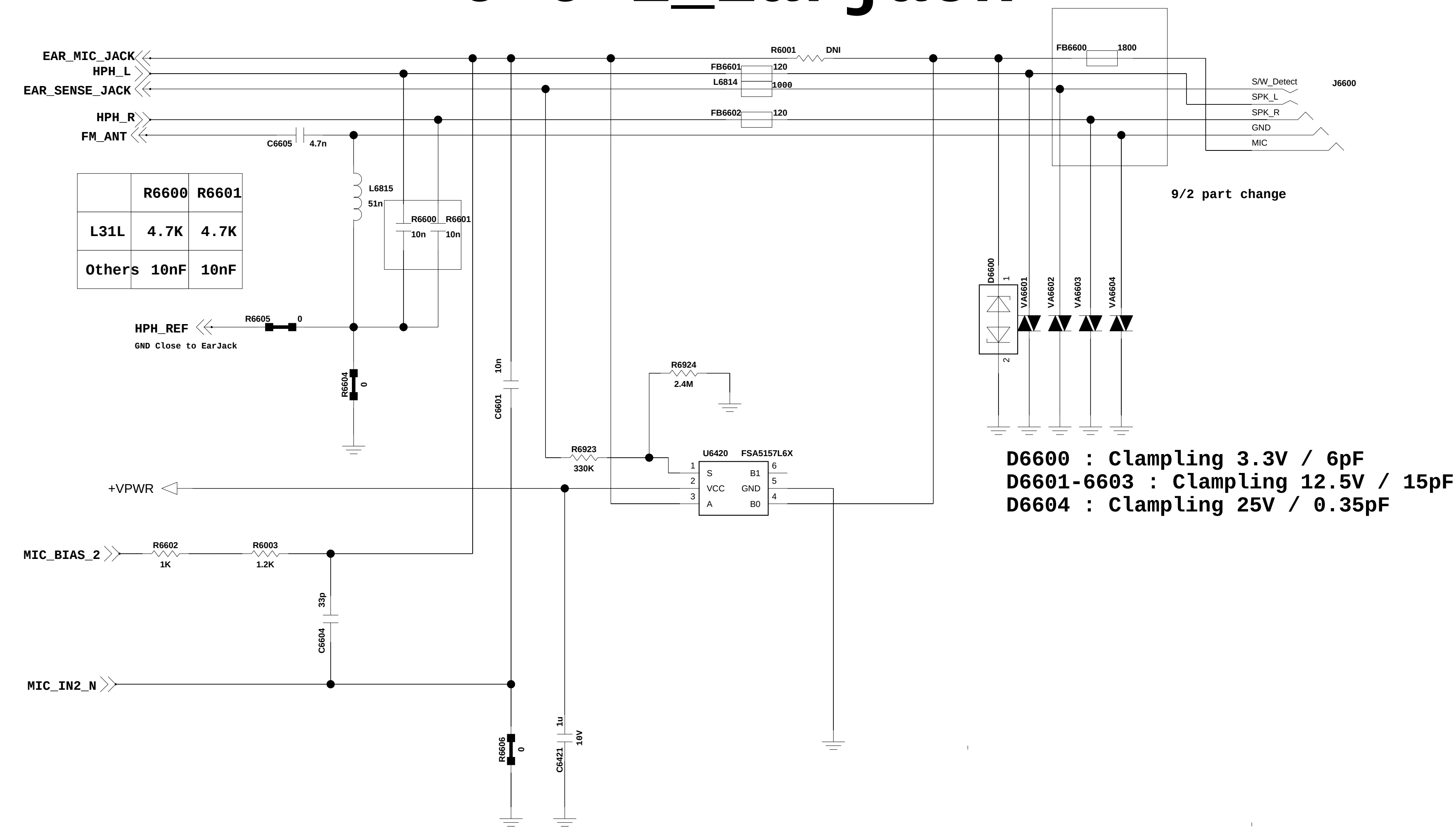
< 6-1-1-1_Codec_WCD9302 >



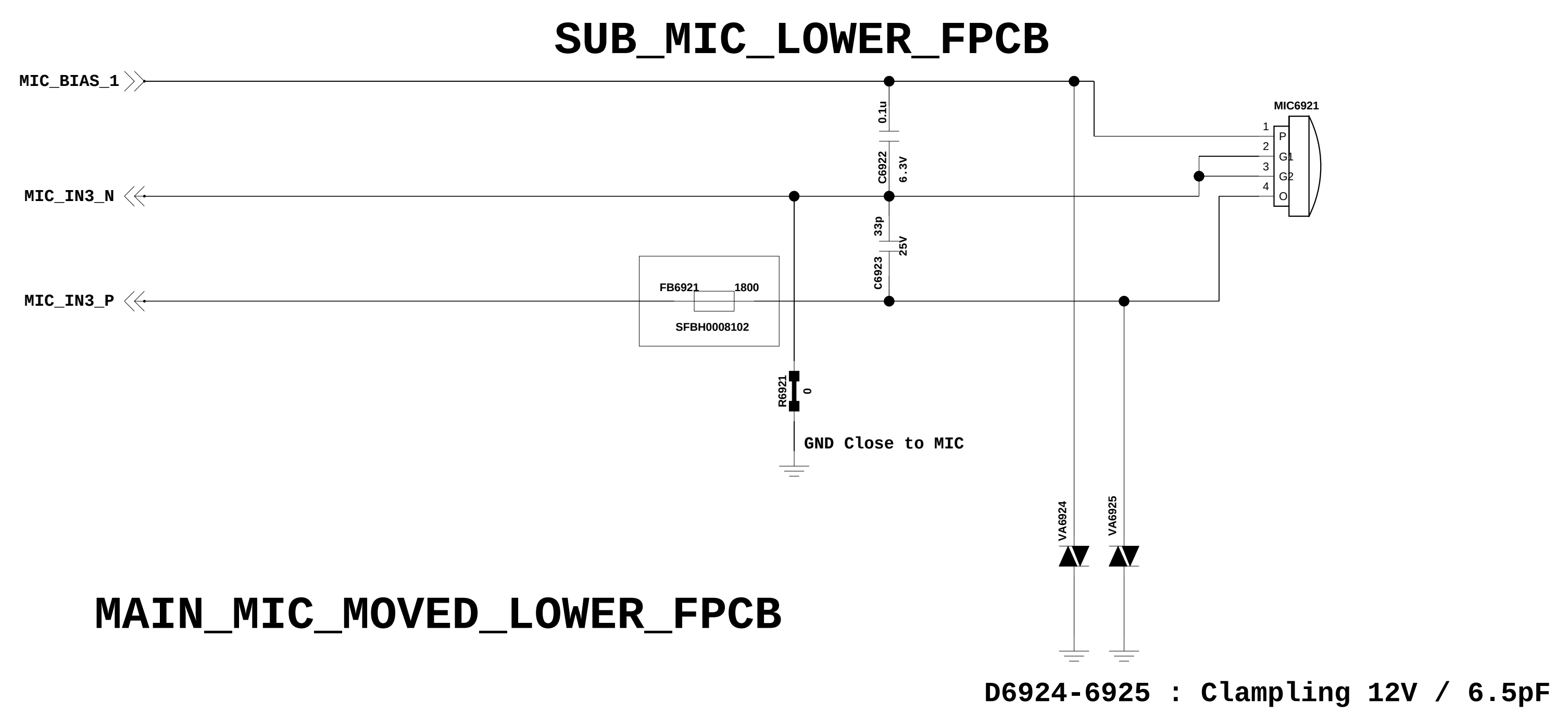
< 6-8-1_Receiver_Only >



< 6-6-1_Earjack >



< 6-9-2_2MIC >



< 7-1-6-2-1_4.7" _qHD >

< 7-2-3_Touch CoB_S2202 >

Rev_0.3

K

K

J

J

I

I

H

H

< 7-3-2_Main_Camera_24pin_5M_8M >

PART_CHANGE_FOR_PERFORMANCE

G

G

F

F

E

E

D

D

C

C

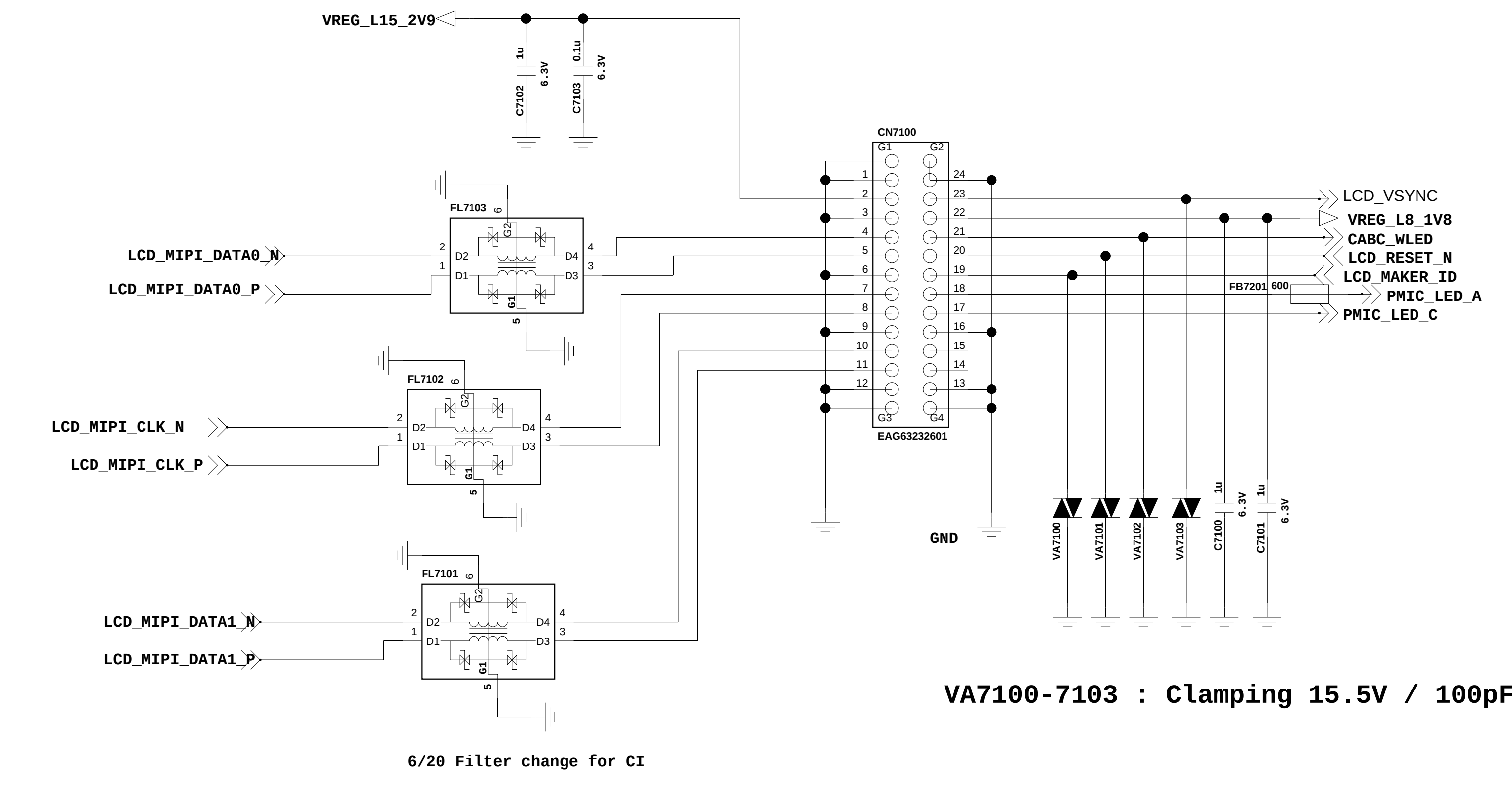
B

B

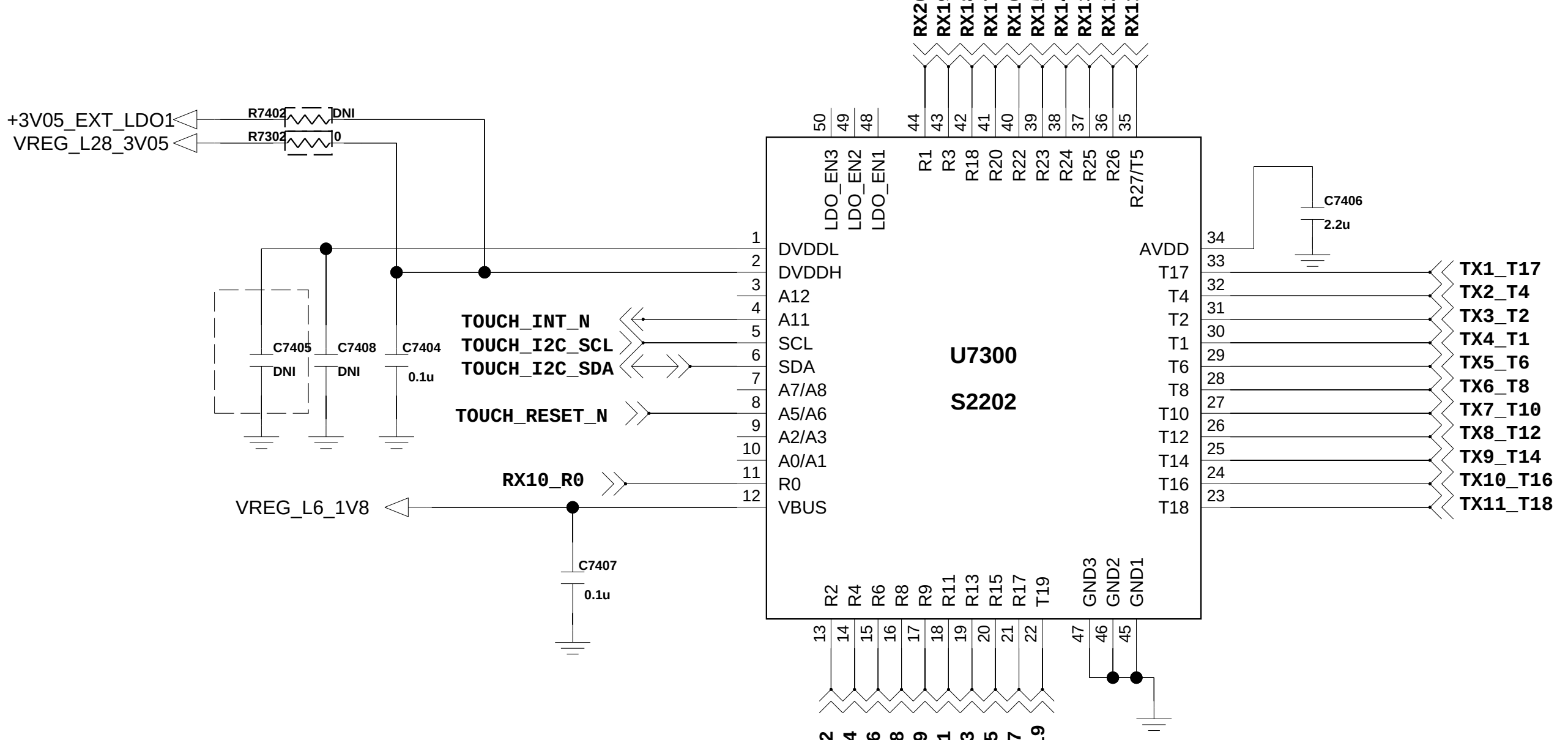
A

A

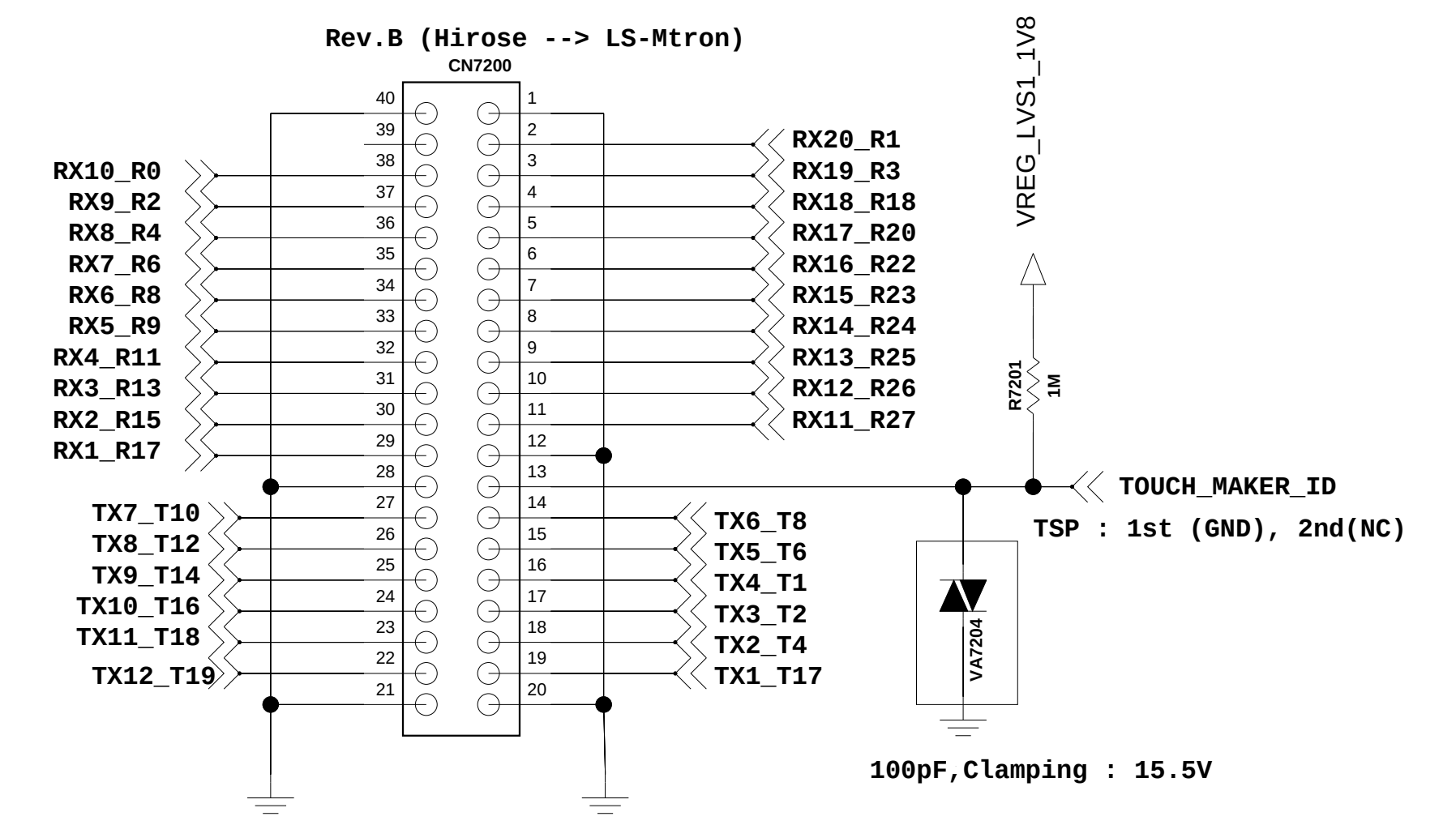
MODIFY New 4.5" WVGA GFF



TOUCH COB

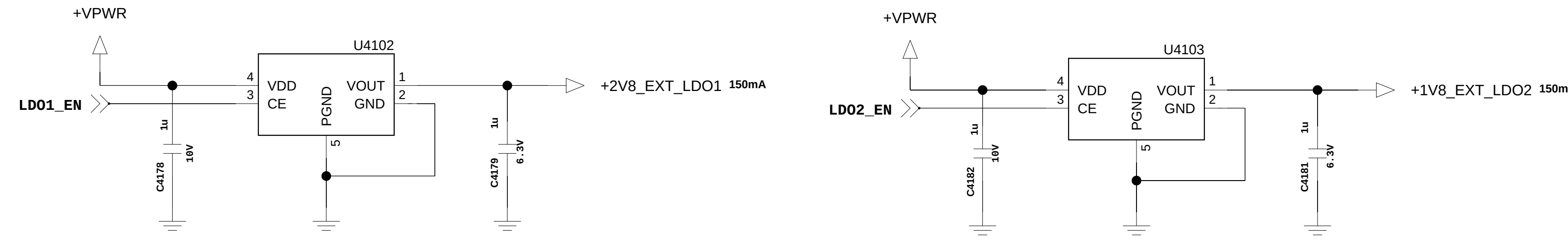


Touch Connector
(B to B type)



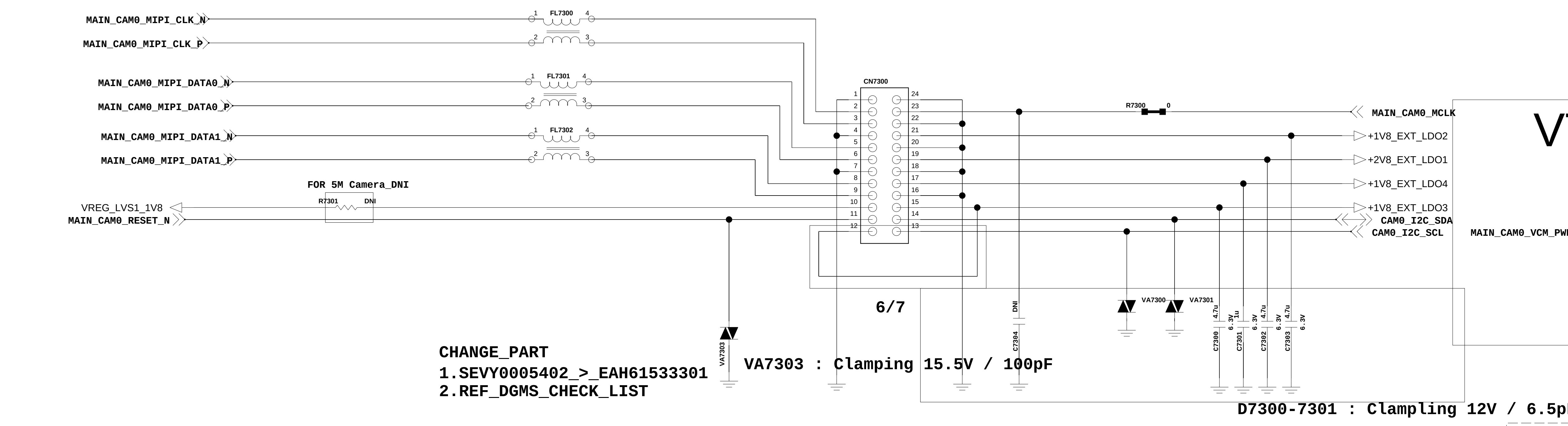
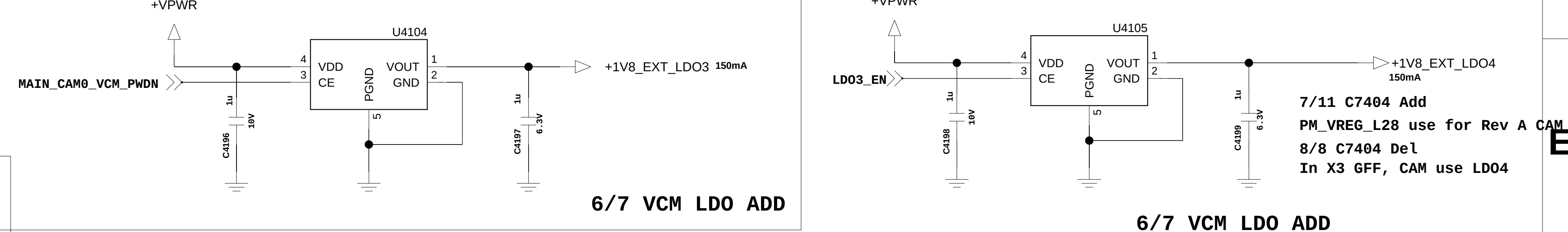
VT_MAIN_CAM_LDO1

VT_MAIN_CAM_LDO2

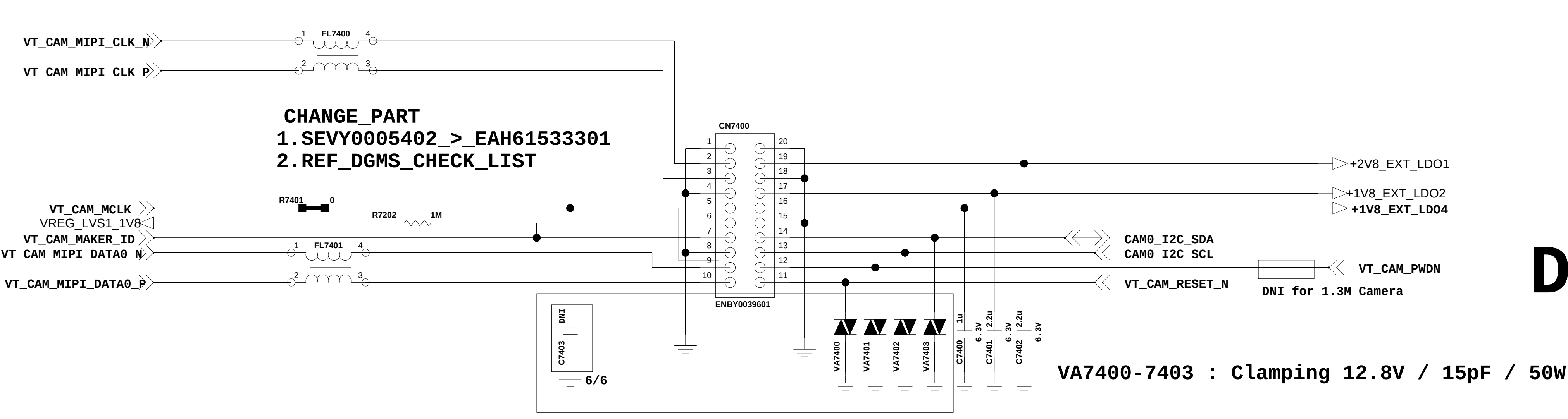


VT_MAIN_CAM_LDO3

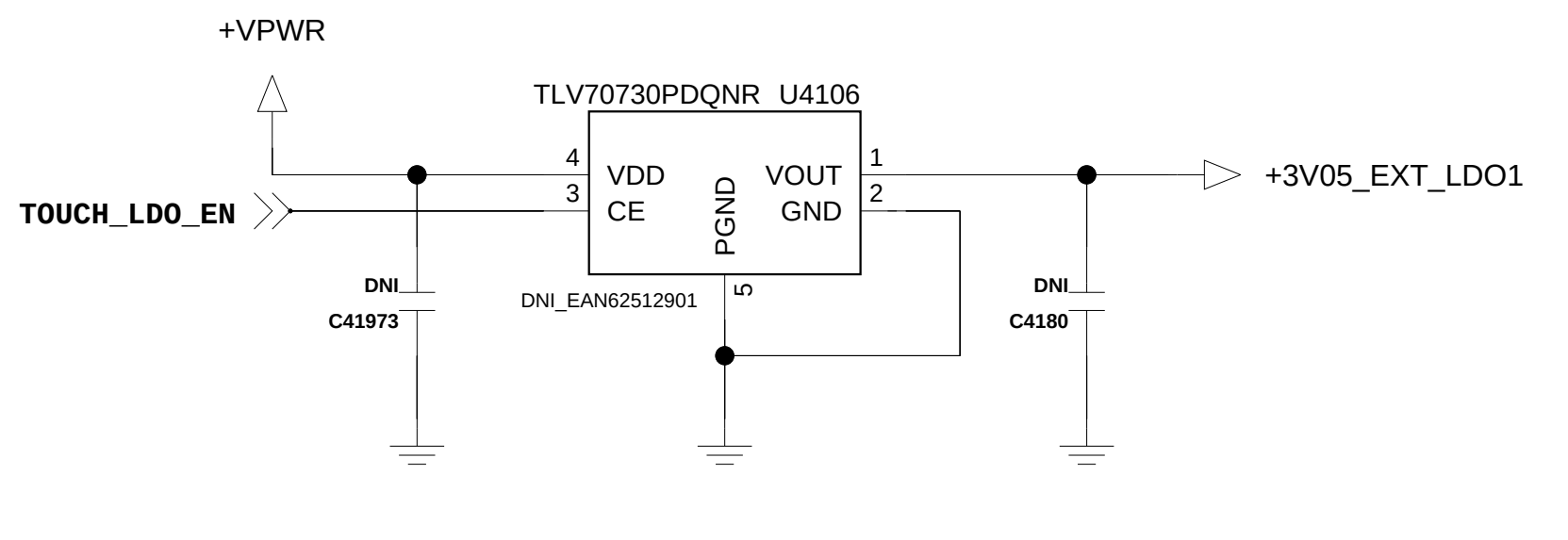
VT_MAIN_CAM_LDO4



< 7-4-1_VT_Camera_20pin_VGA_1.26M_1.3M_2.4M>



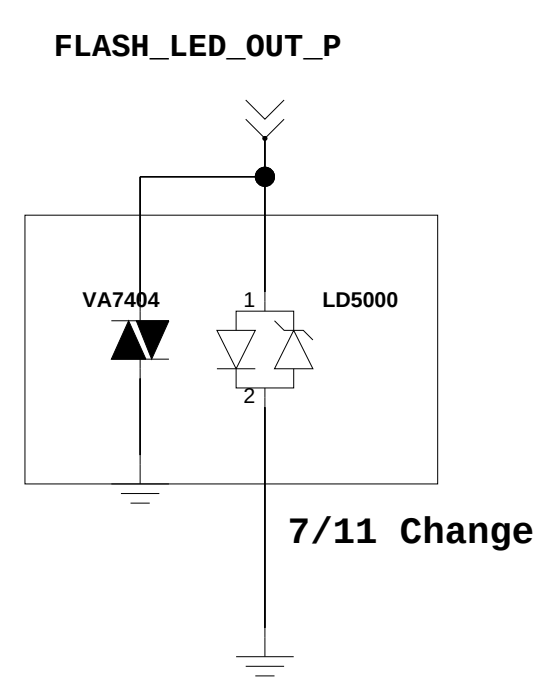
TOUCH_LDO



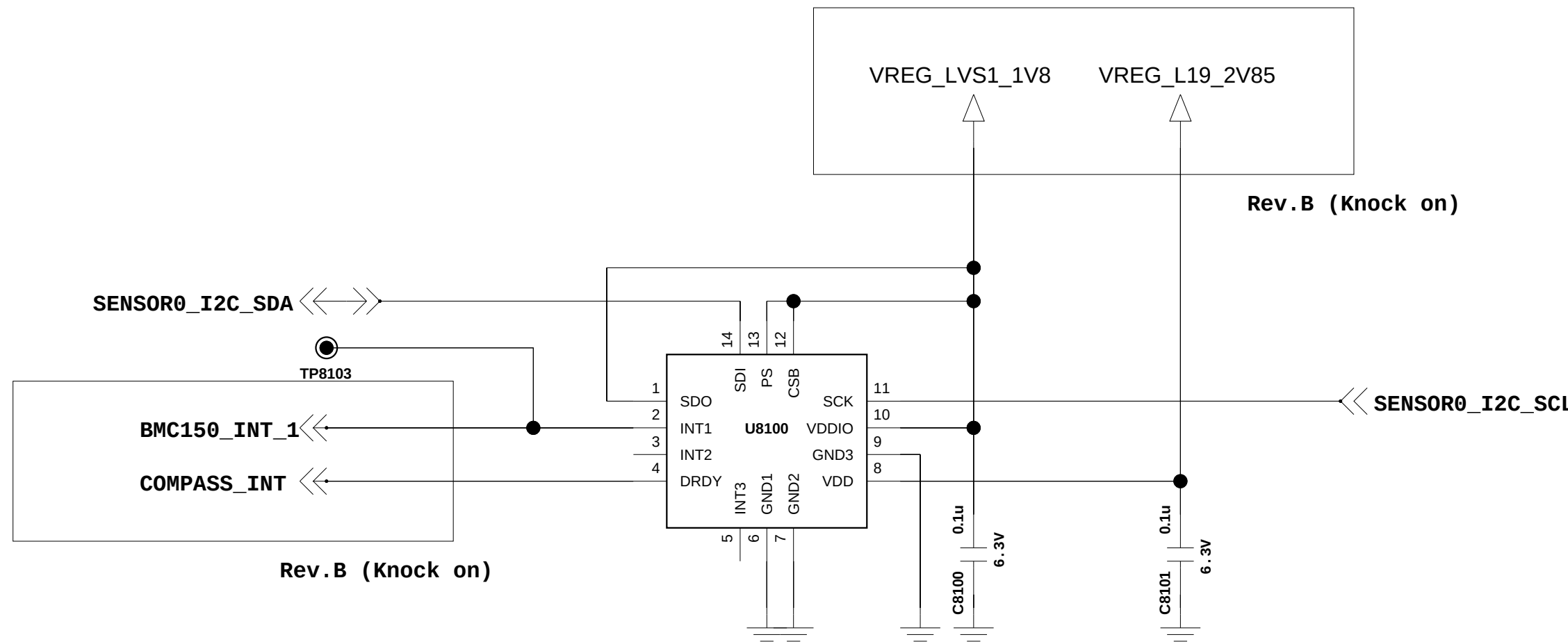
Touch External LDO DNI

DSV (TPS65132/EAN62731801)

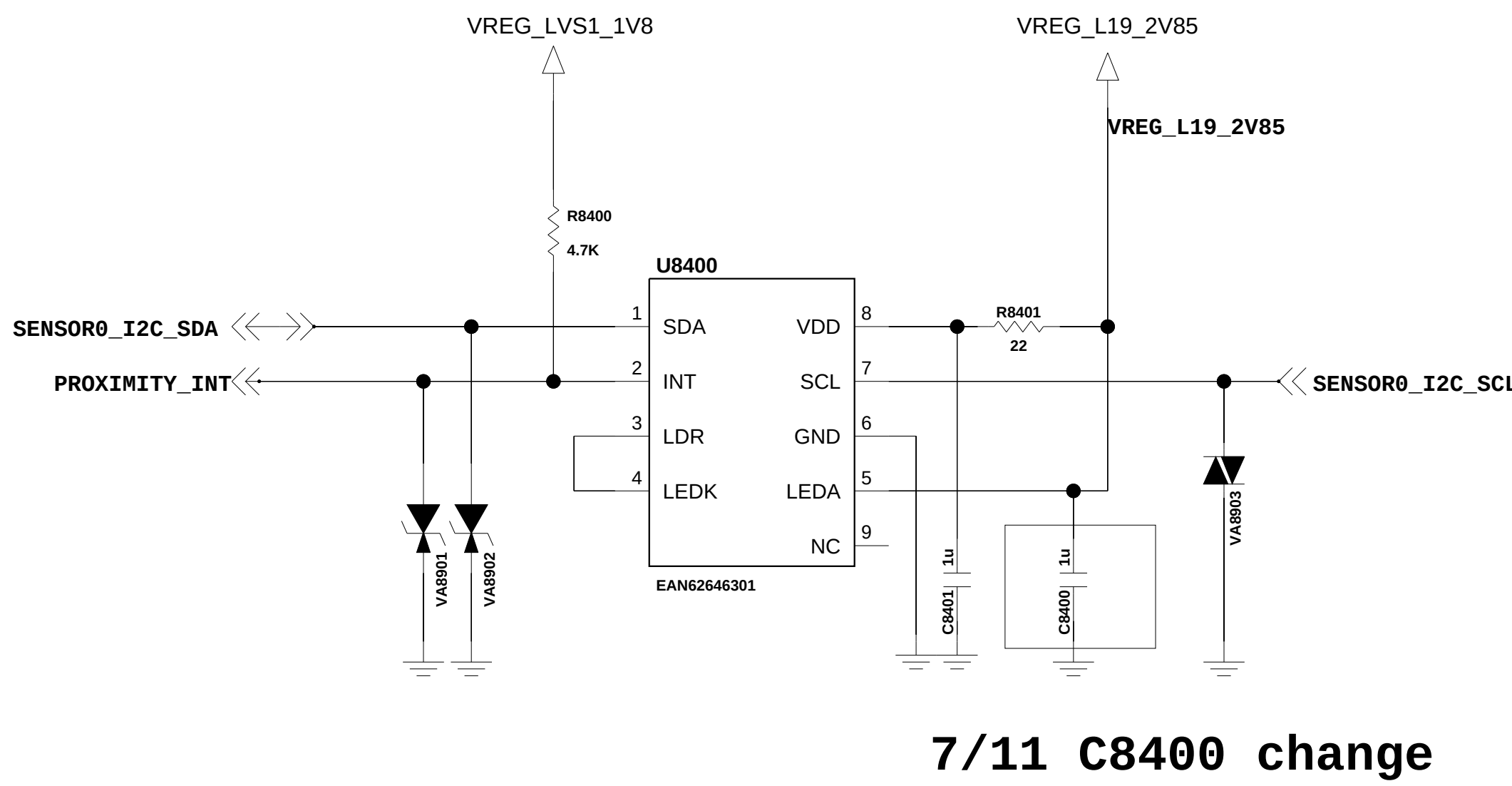
<9-8-3_Flash_LED>
LED MODULE (LOW COST)



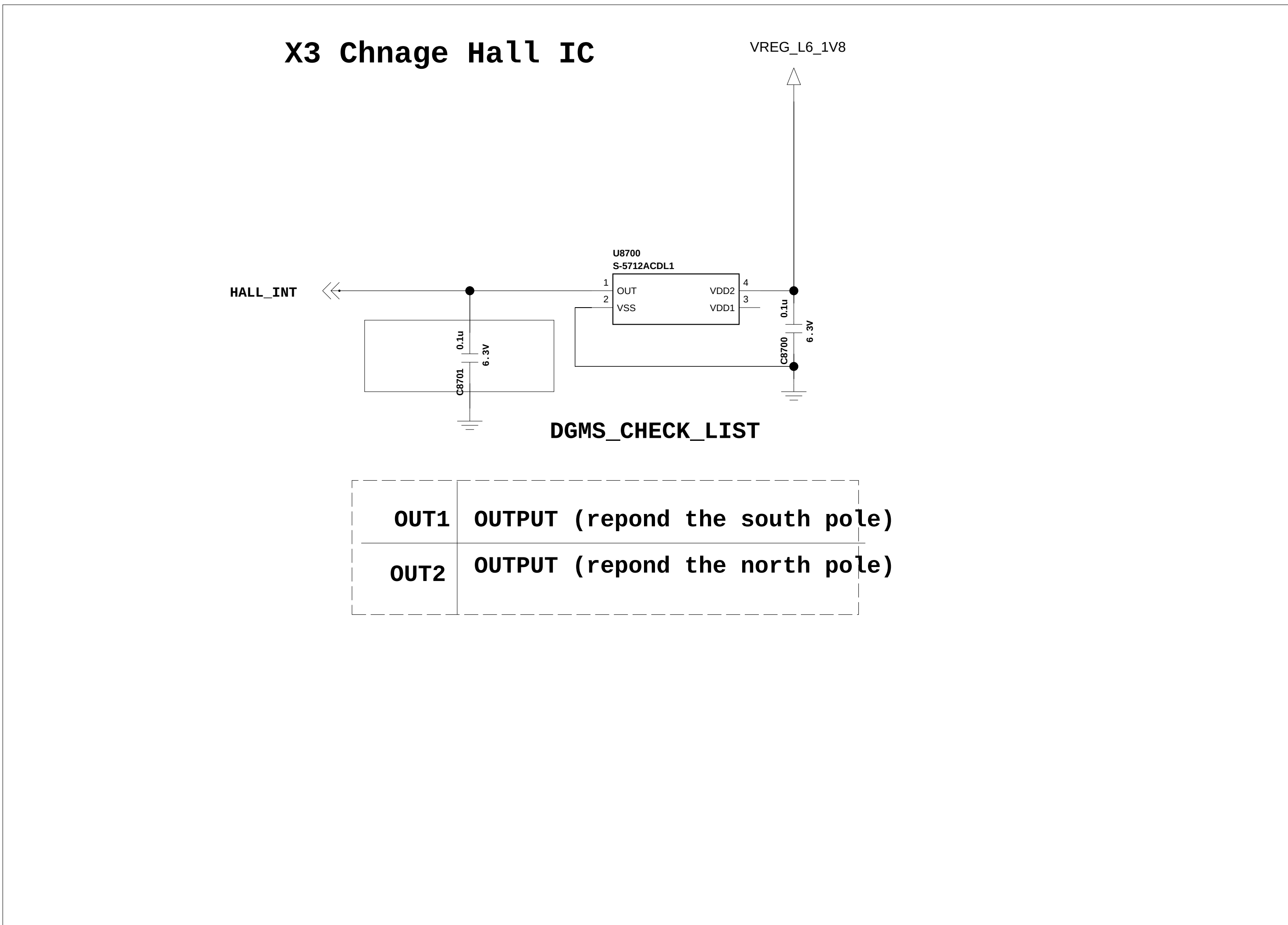
<8-1-2-1_Accel_Compass_BMC150>



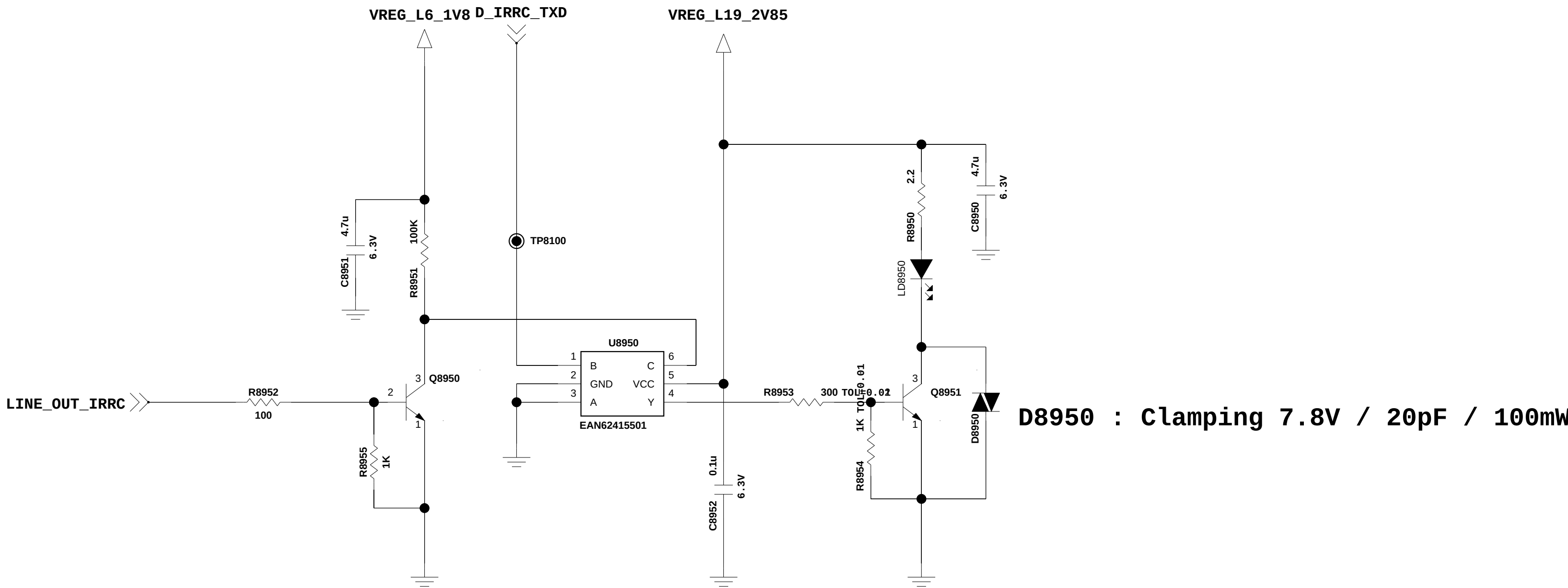
<8-4-1-1_Proximity_APDS-9130>



<8-7-1-2_Hall IC_X3>



< 8-9-1-2_IRRC_w/o_driver_IC >



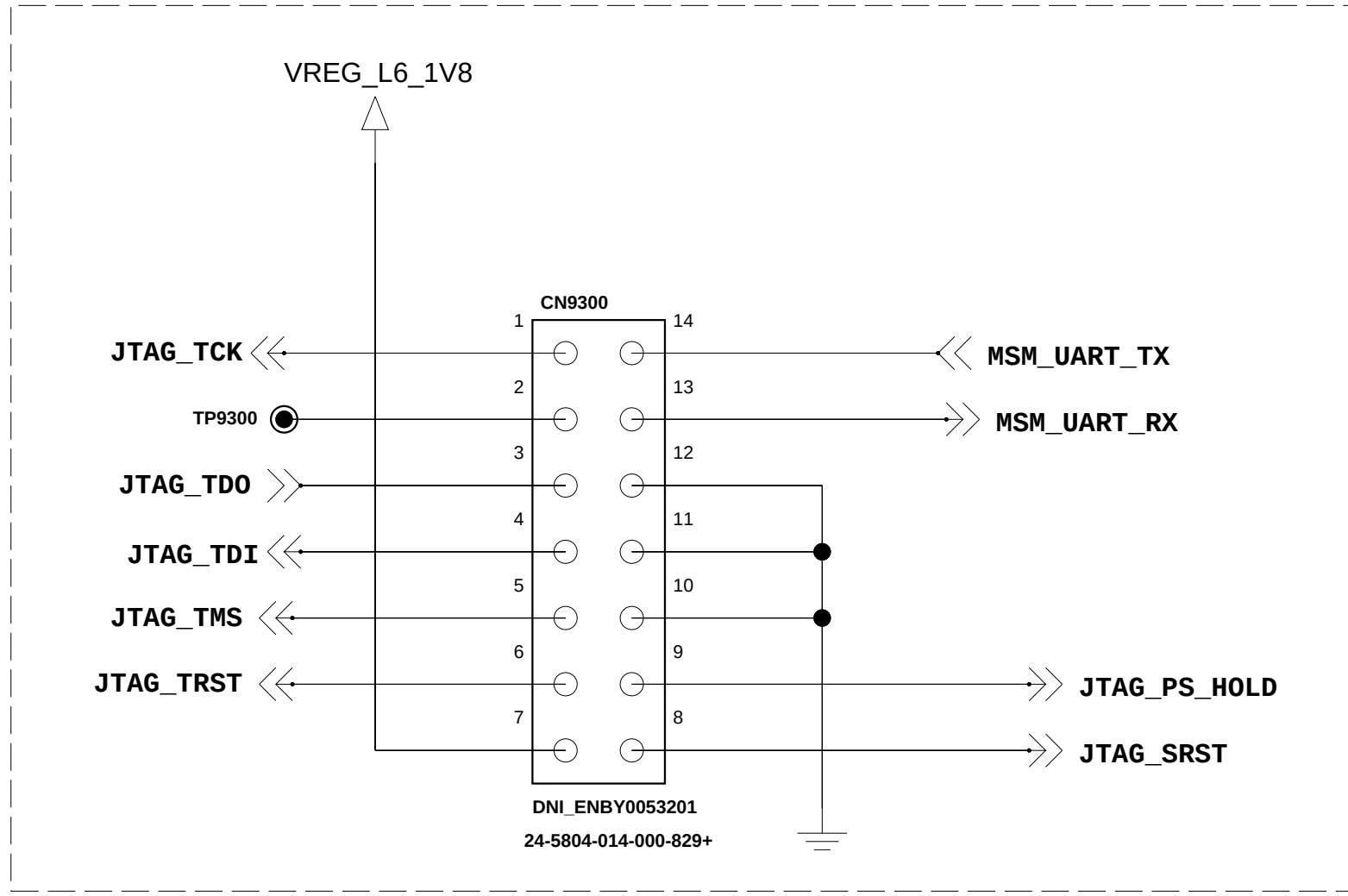
< 9-7-1_Power_Lock_Volume_Key >

< 9-7-4_Quick_Memo_Key_SW >

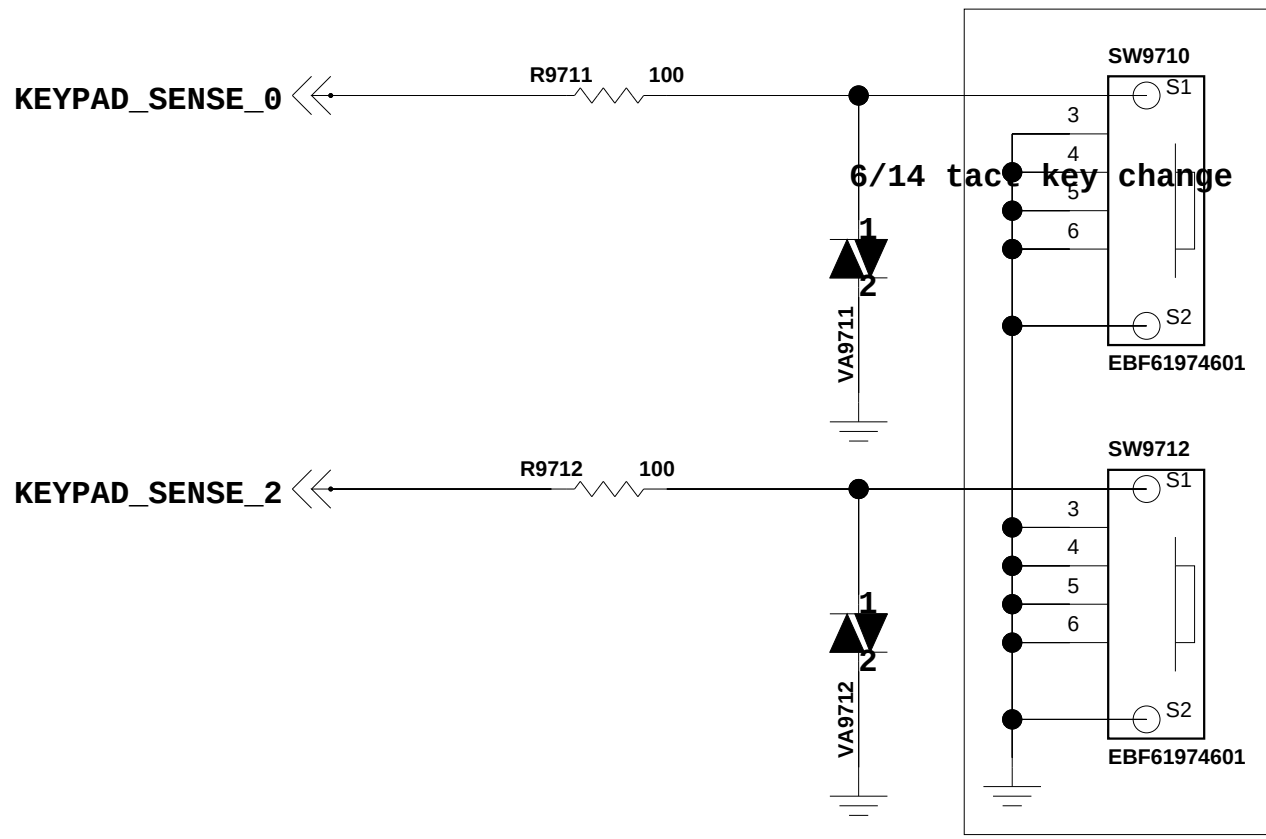
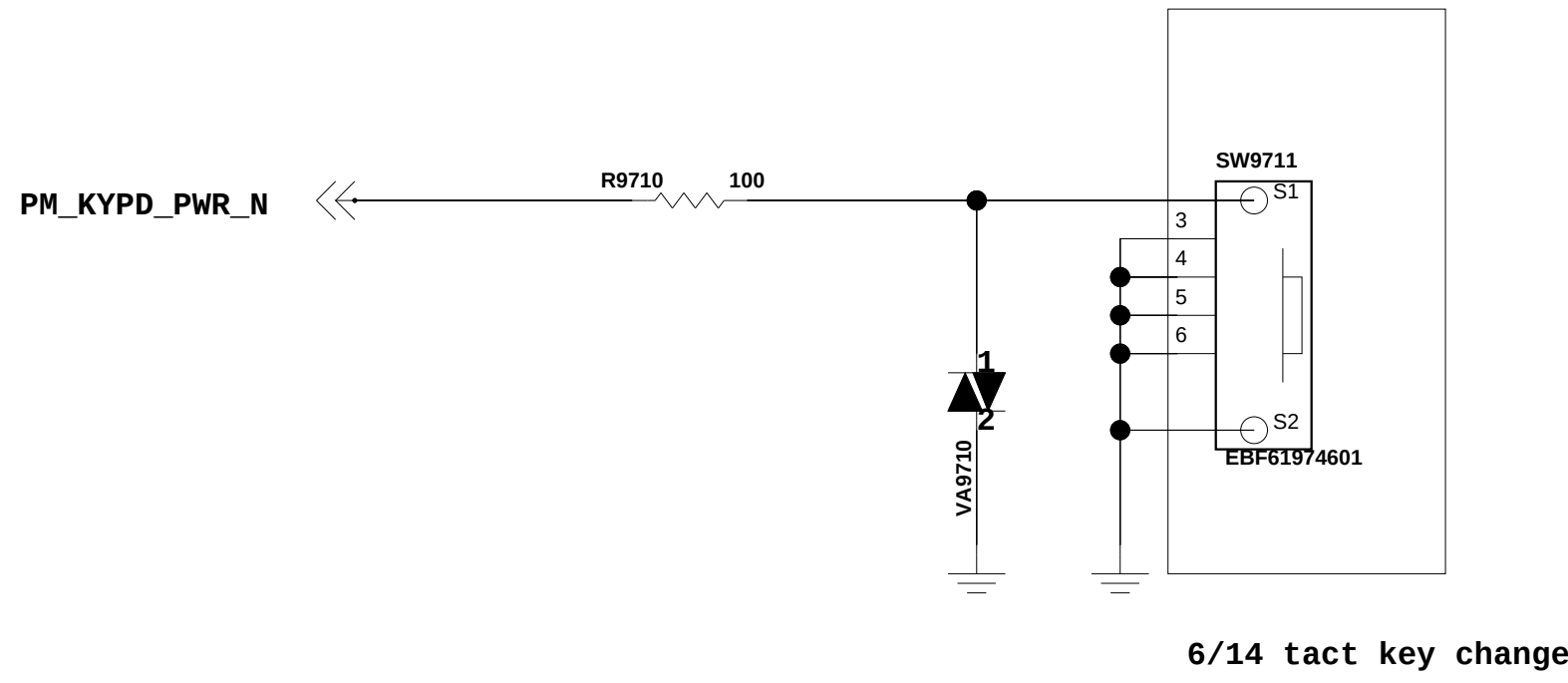
< 9-3-1_JTAG >

POWER & LOCK KEY

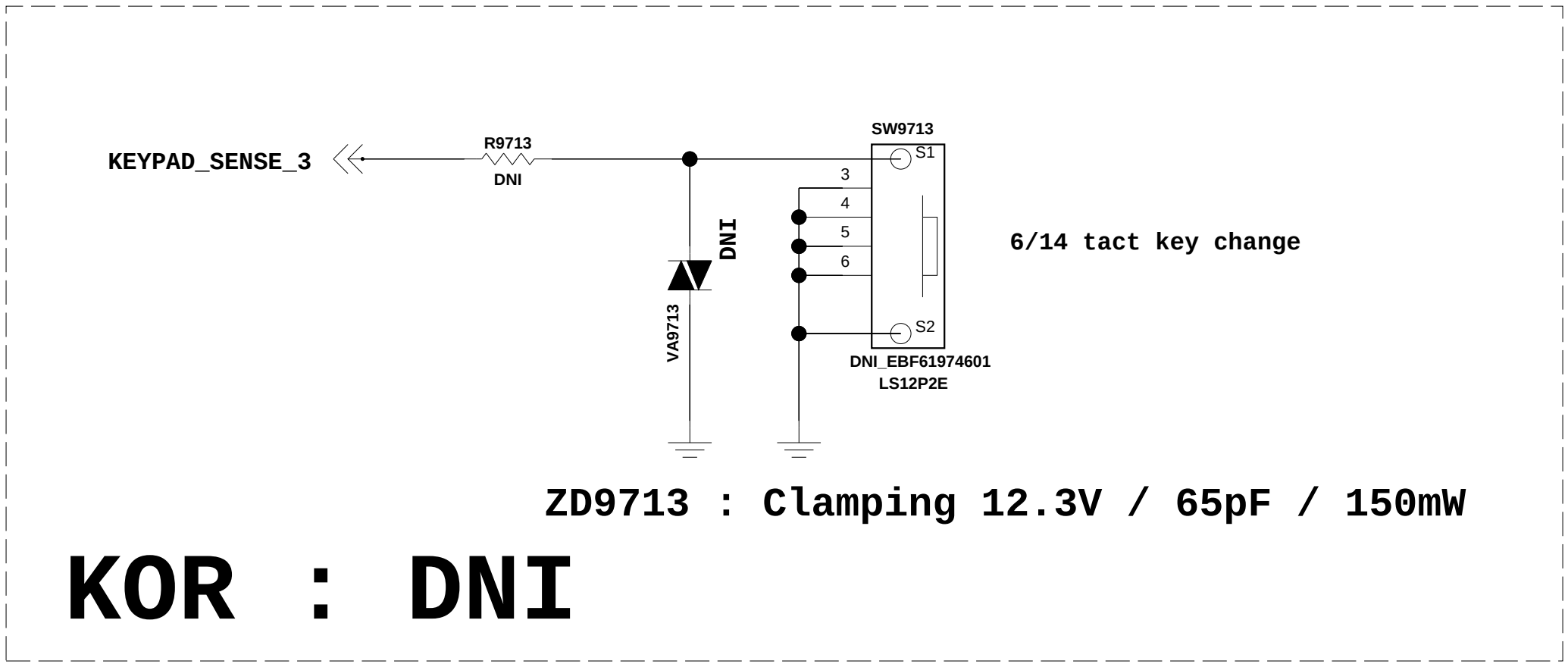
Vol. UP/DOWN



KOR : DNI



ZD9710,9711,9712 : Clamping 12.3V / 65pF / 150mW

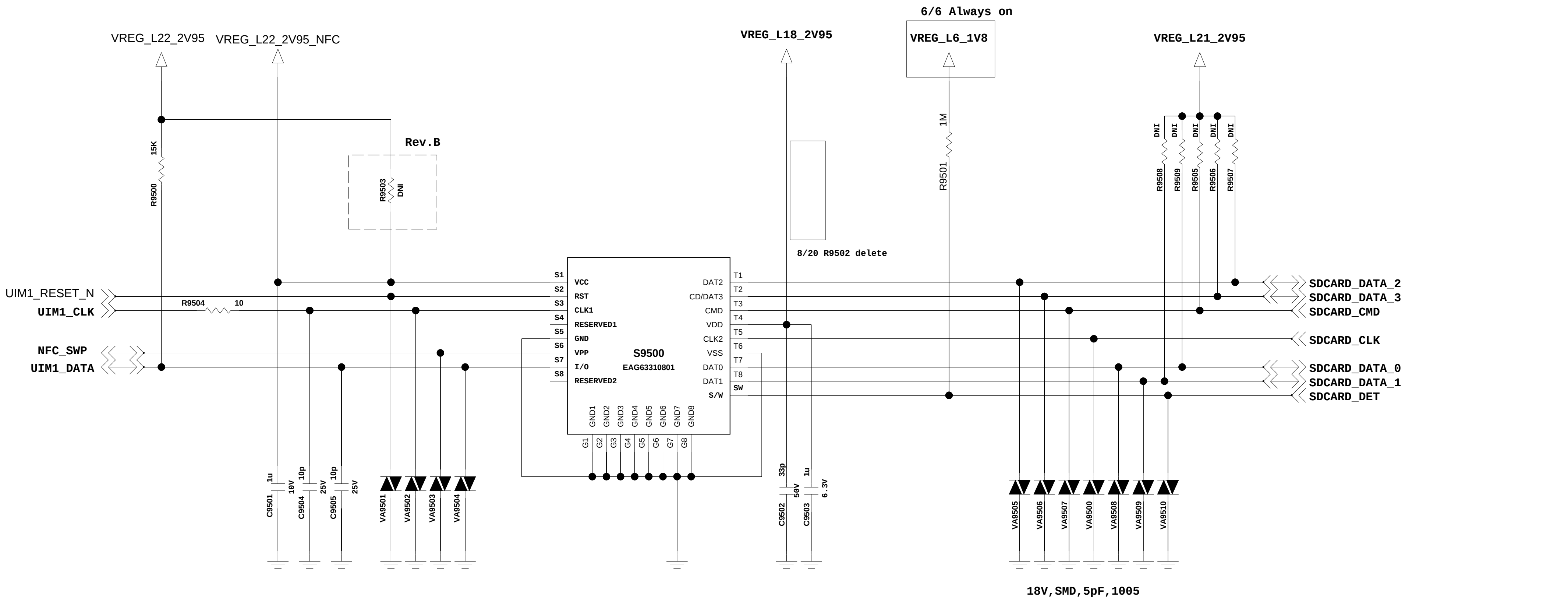


KOR : DNI

ZD9713 : Clamping 12.3V / 65pF / 150mW

< 9-5-3_Micro_SD_Combo >

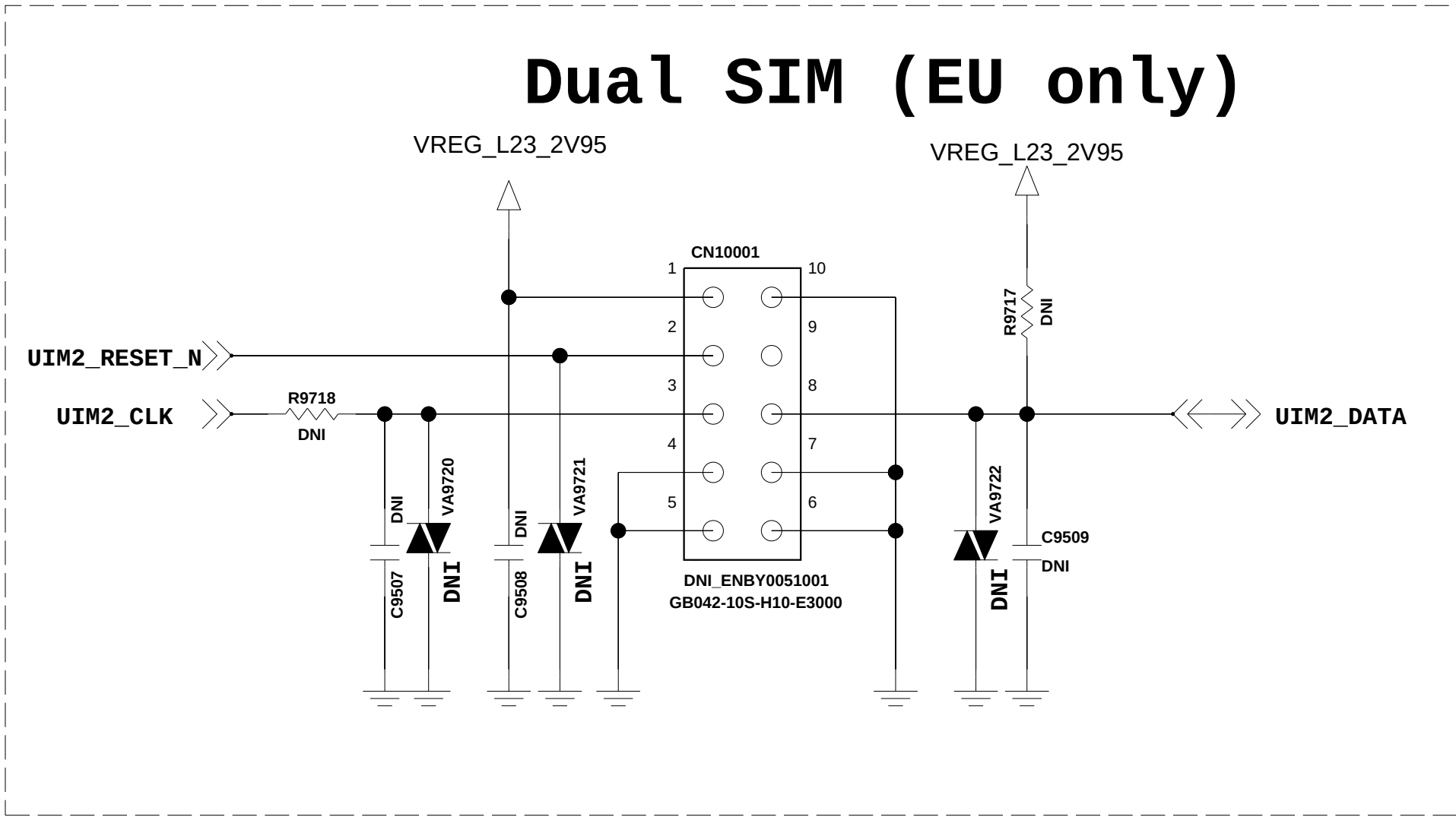
LOWER_FPCB_CON._MAIN



ZD9501,9510 : Clamping 15.5V / 100pF

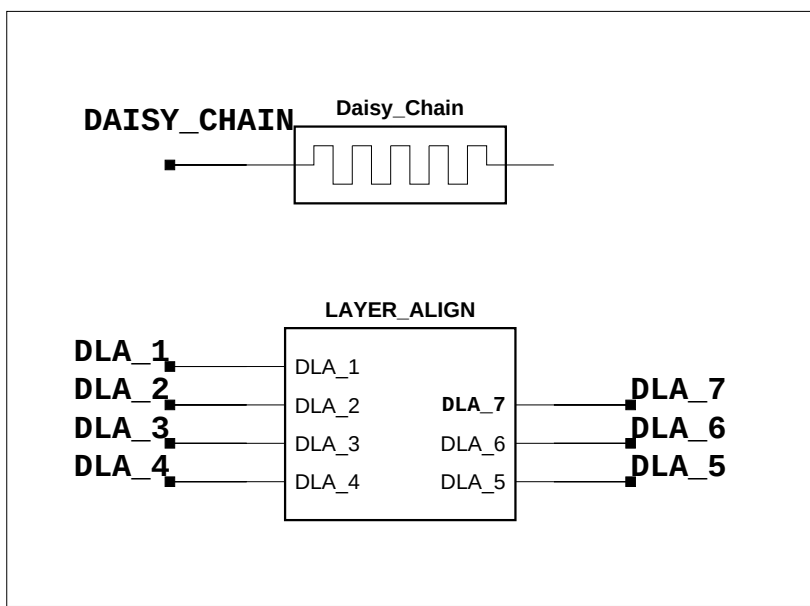
ZD9500,9502-9509 : Clamping 12.8V / 15pF / 50W

Card Detect	SW1	SW2	SD_CARD_DET
Card Installed			GND
Card Not Installed			1.8V

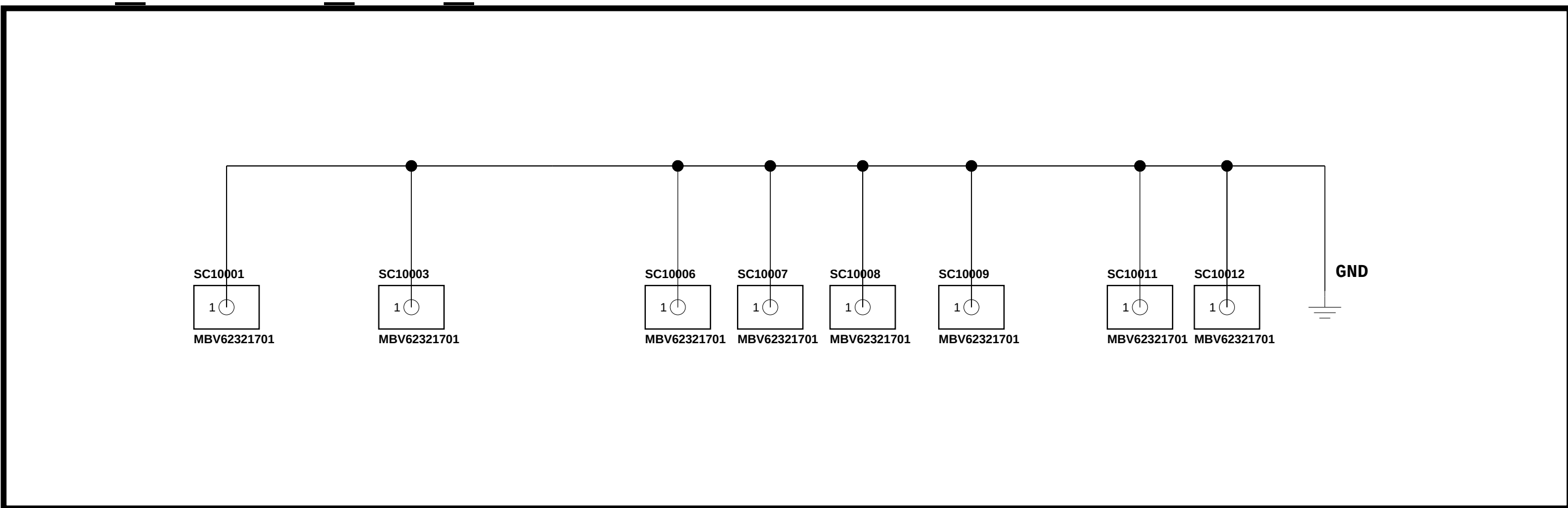


KOR : DNI

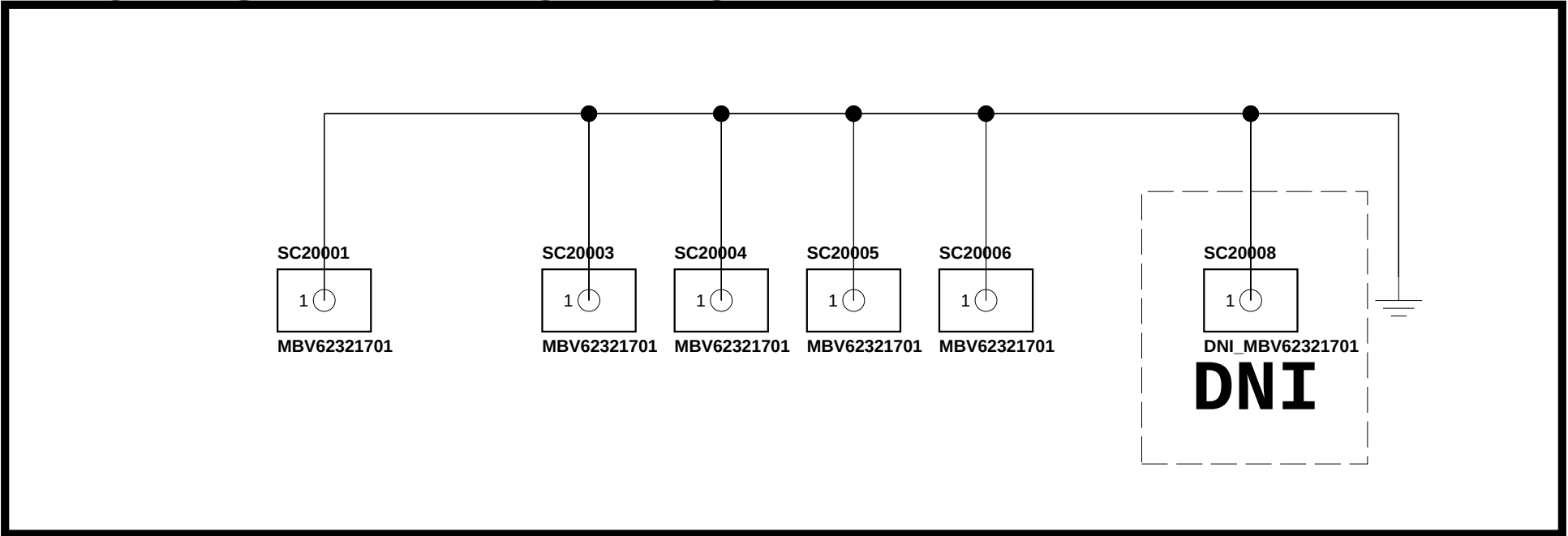
NFC_PN547(EU only)



TOP SHIELD CAN CLIP

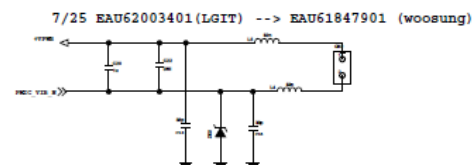


BOT SHIELD CAN CLIP



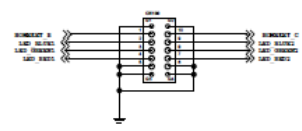
A	B	C	D	MODEL
0	0	0	0	D315
0	0	0	1	D315E
0	0	1	0	D315h
0	0	1	1	D315K
0	1	0	0	D317
0	1	0	1	
0	1	1	0	
0	1	1	1	
1	0	0	0	F370E
1	0	0	1	
1	0	1	0	
1	0	1	1	
1	1	0	0	F370E/F370
1	1	0	1	
1	1	1	0	
1	1	1	1	L31L

KEY LED Deleted



< K-PJT FPCB >

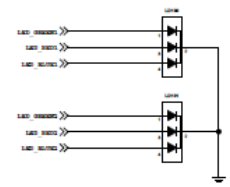
K-PJT CONNECTOR
change from HIROSE to KYOCERA(7/5)



HOME_KEY
change from panasonic to citizen(7/4)



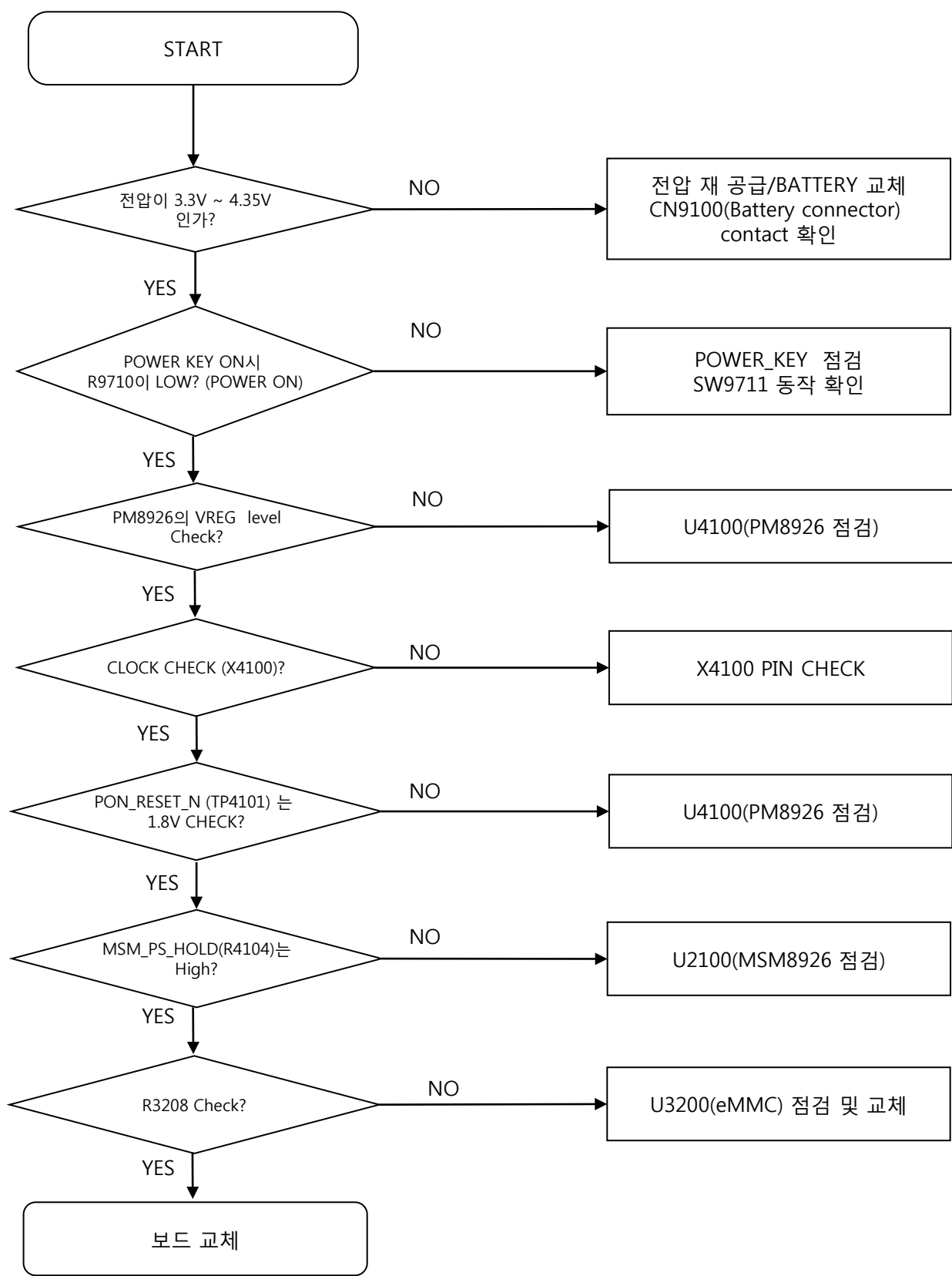
RGB LED



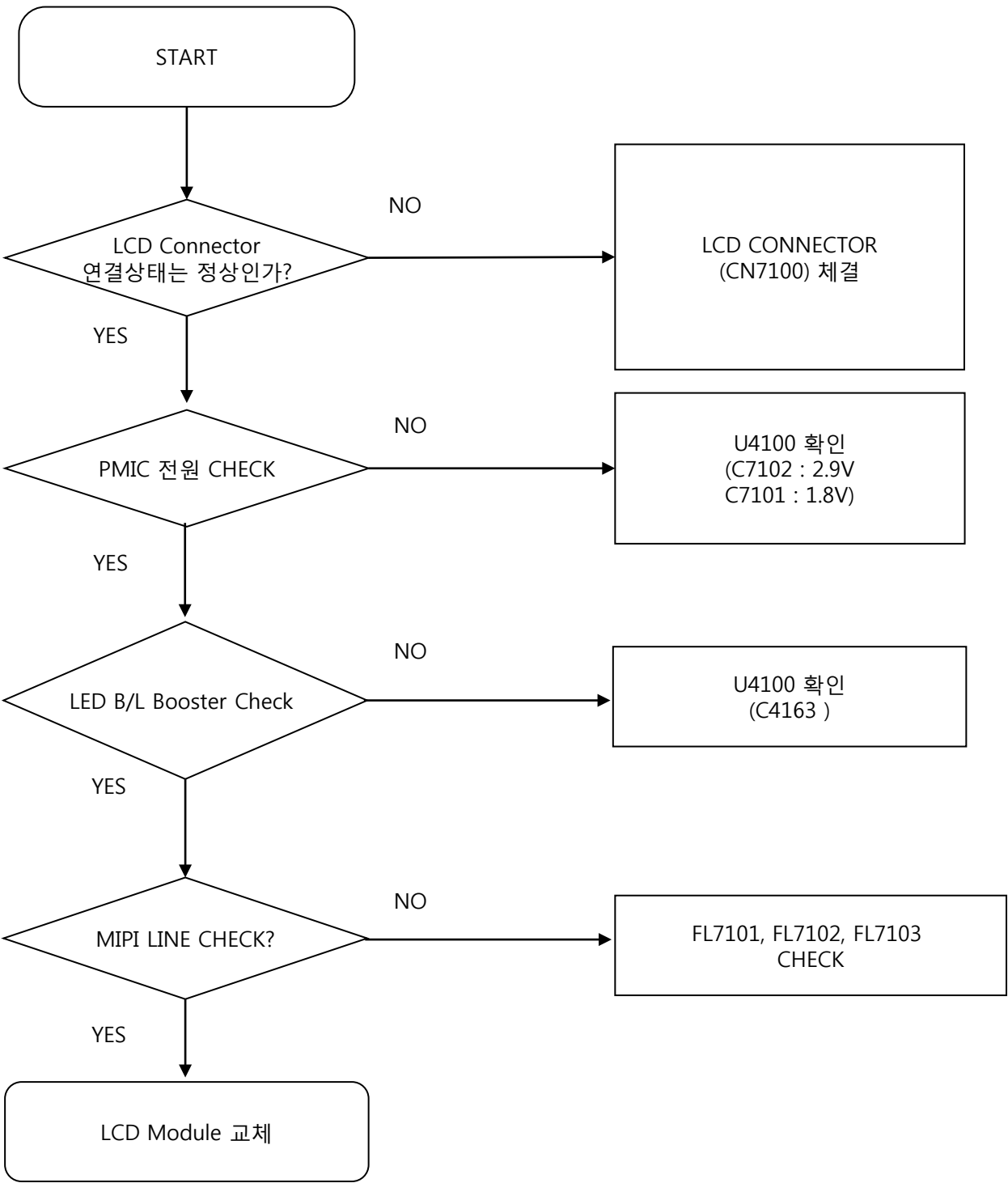
사. 주요기능 수리방법



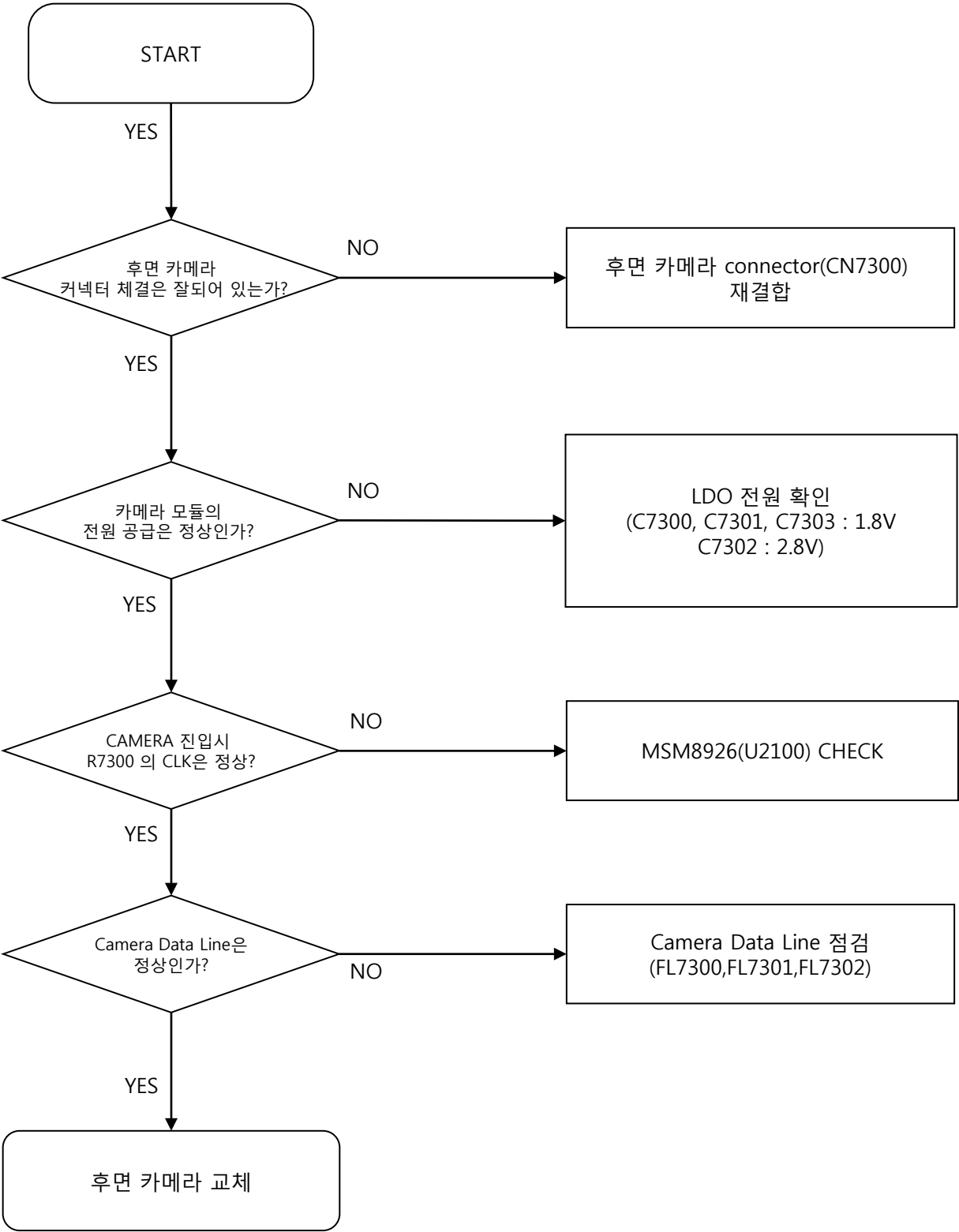
1. POWER가 들어 오지 않을 때



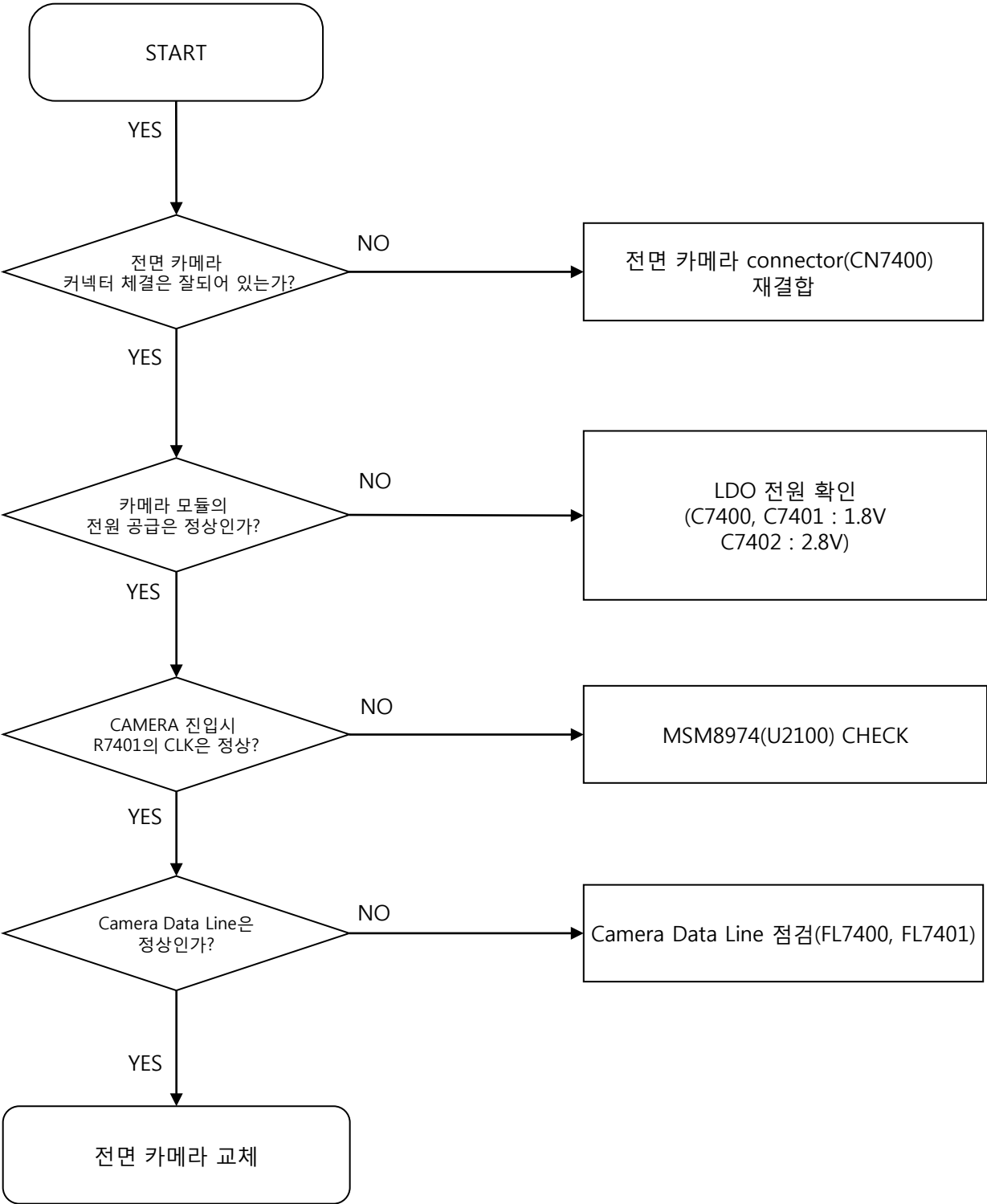
2. Main Display가 켜지지 않을 때



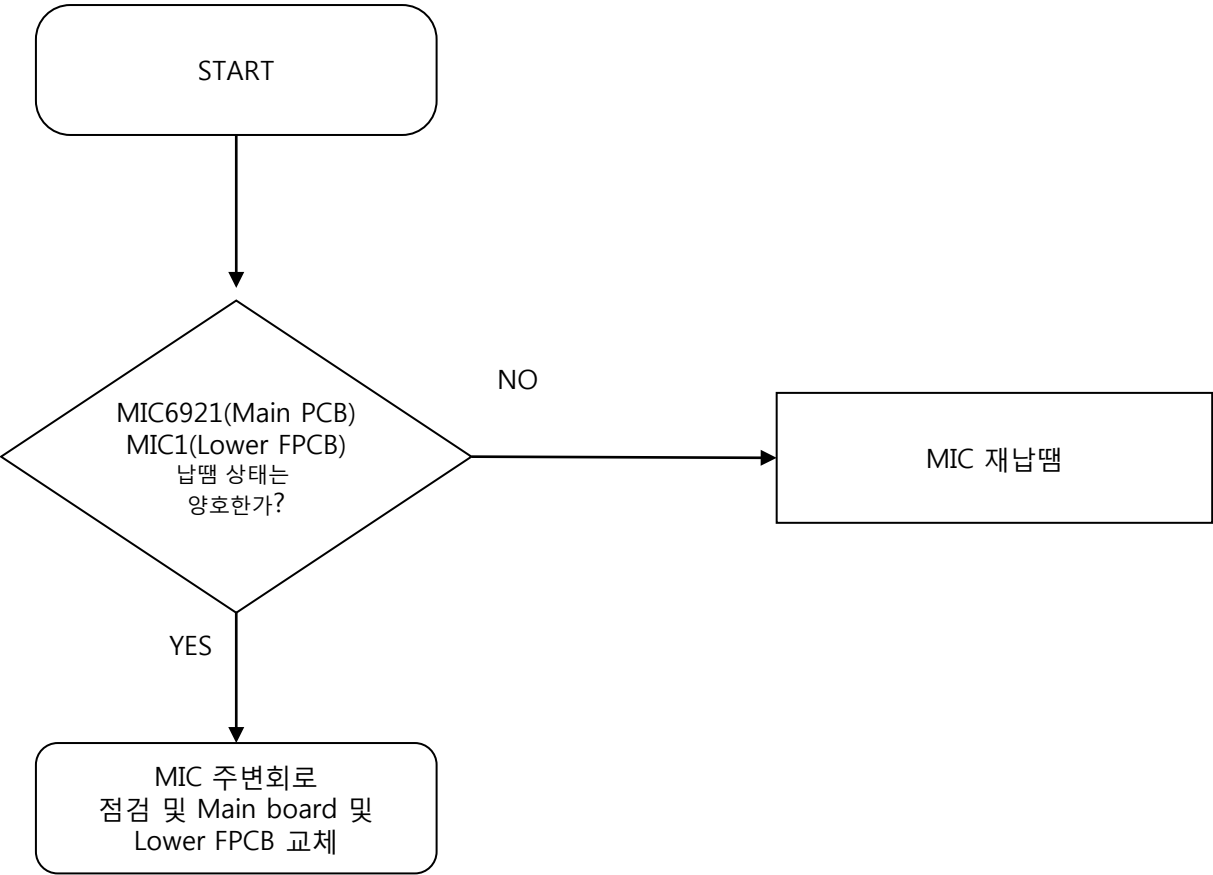
3. 5M 후면 Camera가 동작을 하지 않을 때



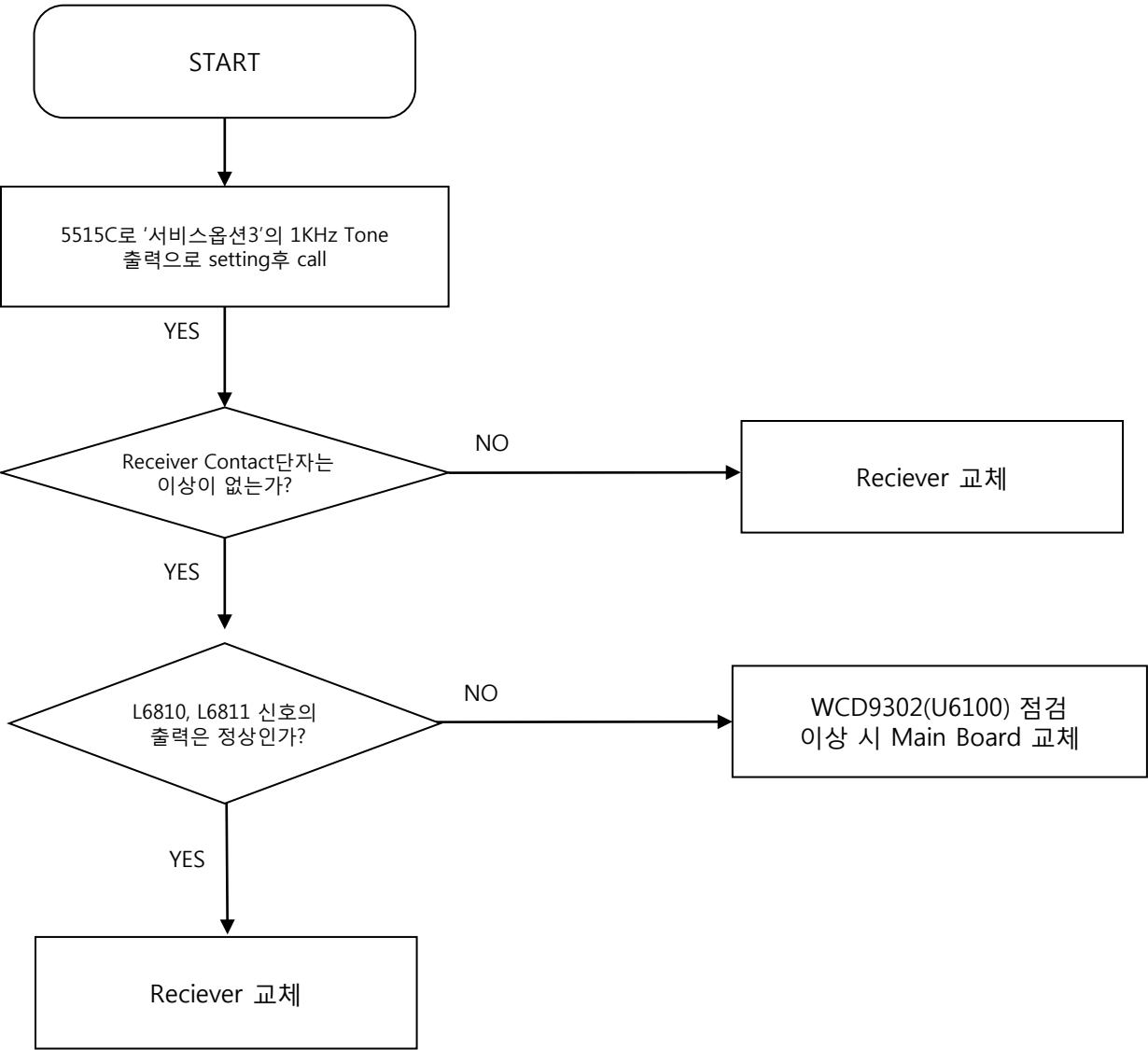
4. VGA 전면 Camera가 동작을 하지 않을 때



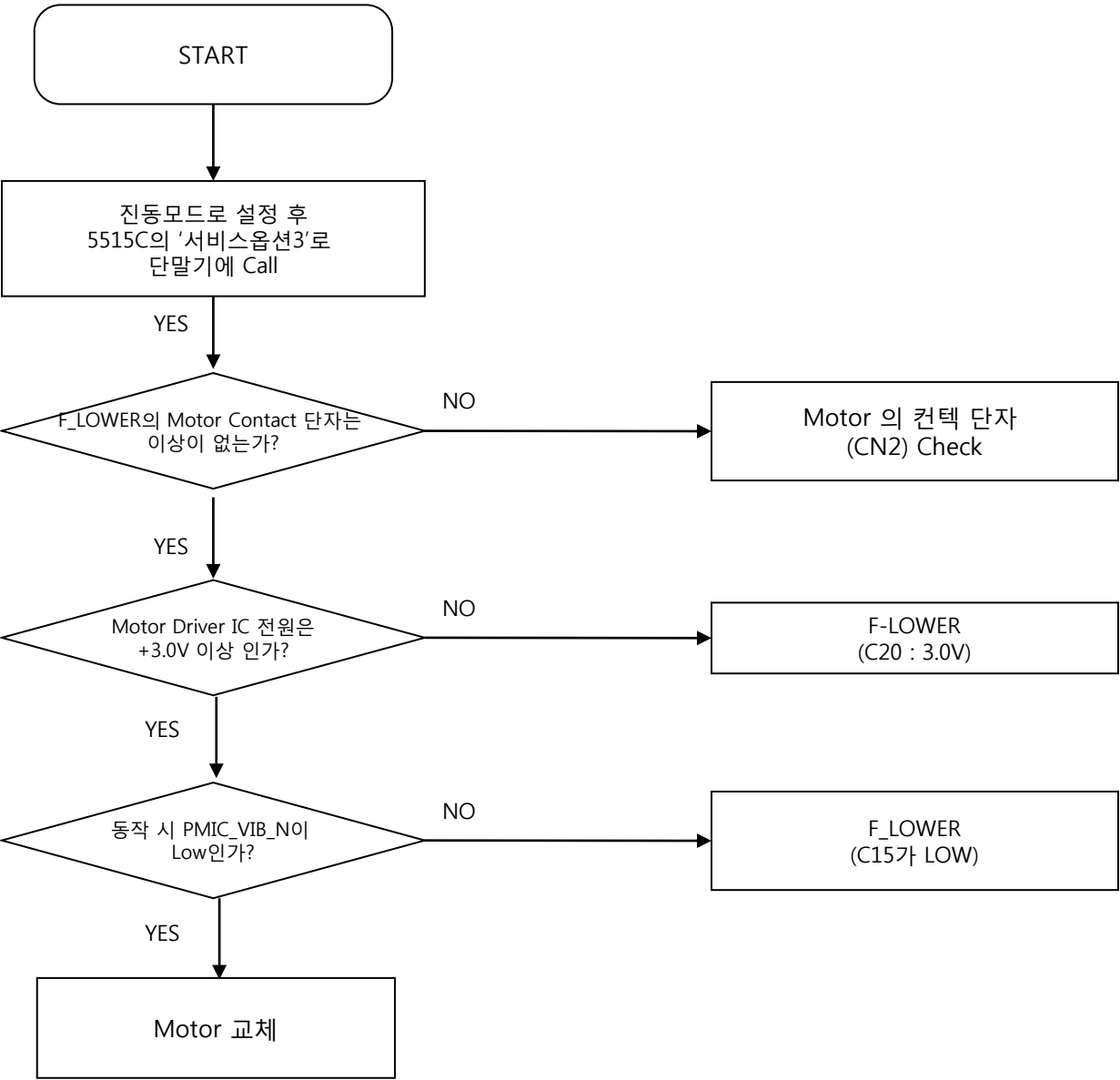
5. Mic 가 안될 때



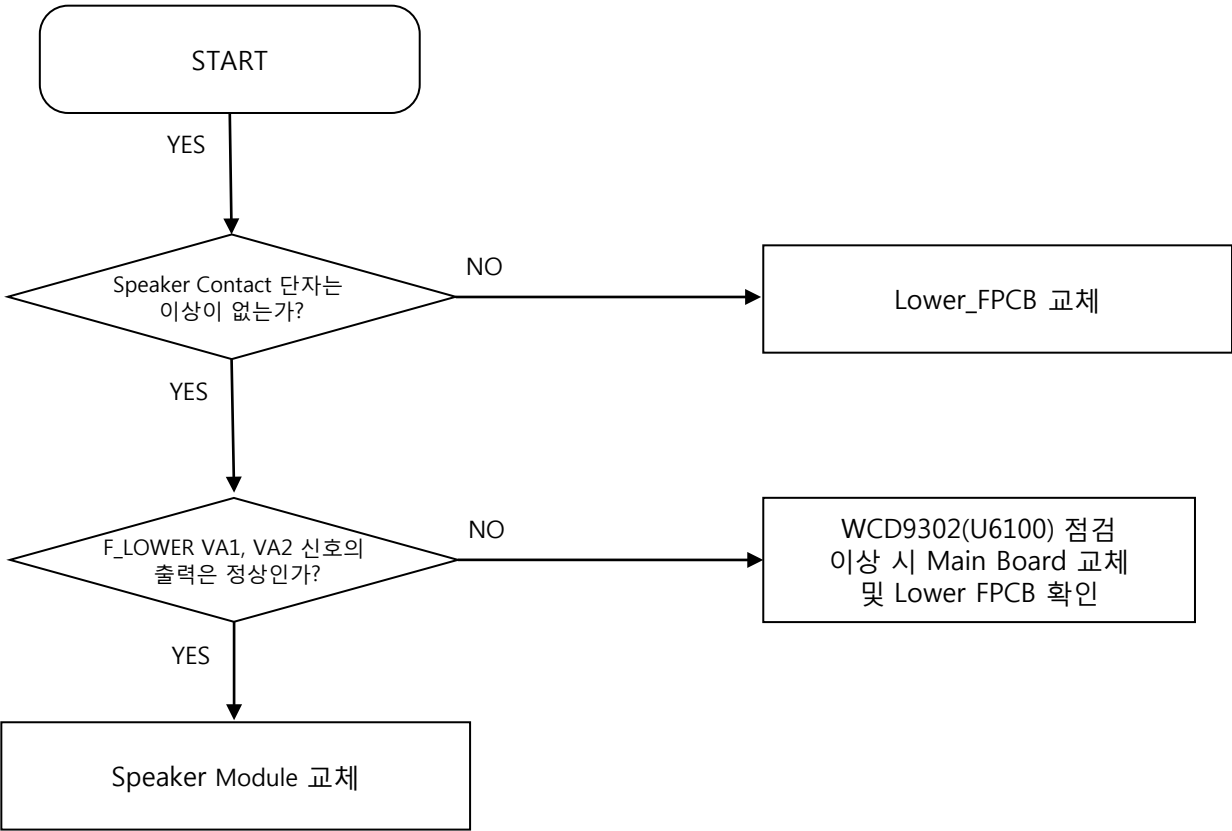
6. 수화 음이 잘 들리지 않을 때



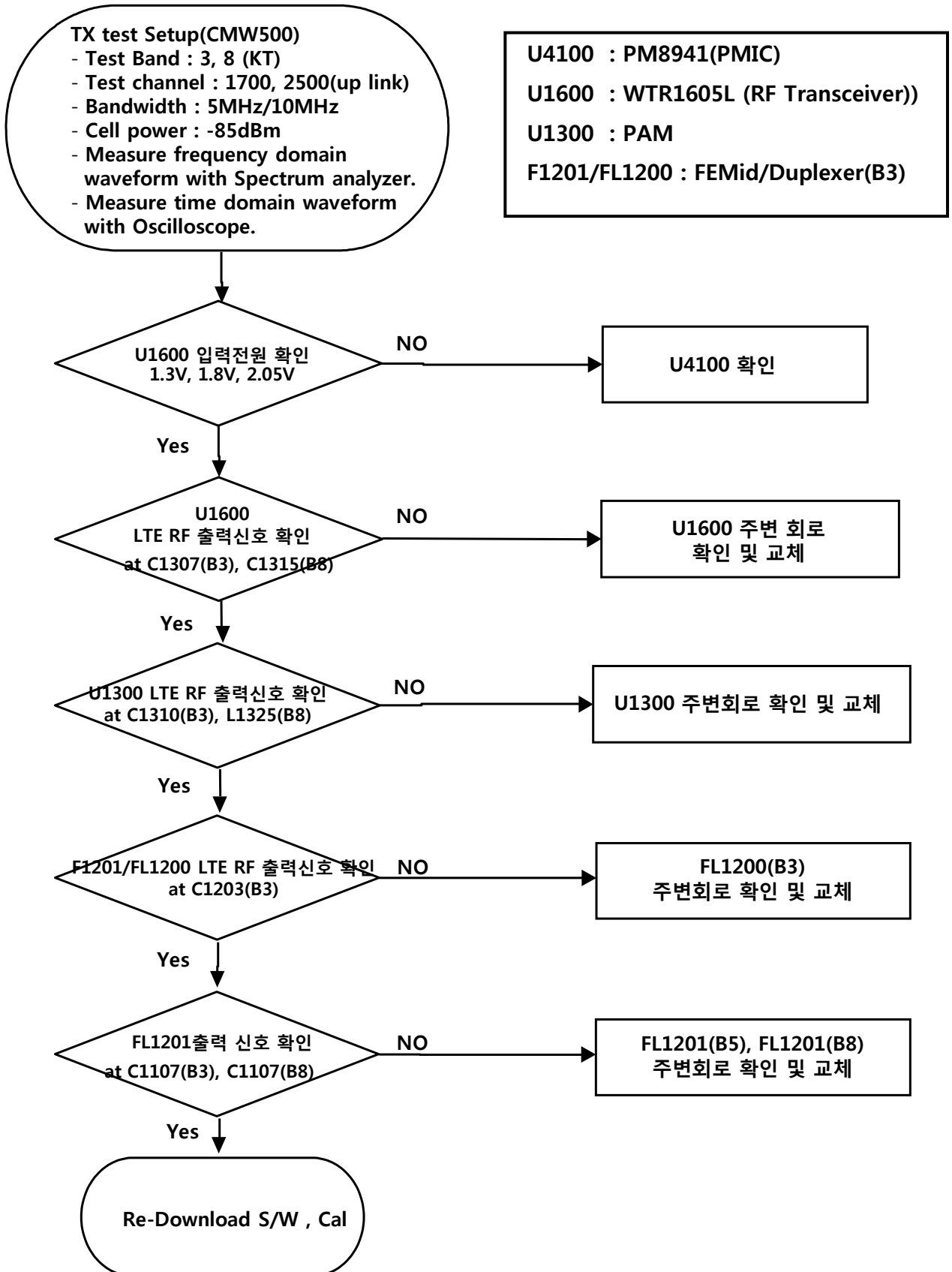
7. 진동이 되지 않을 때



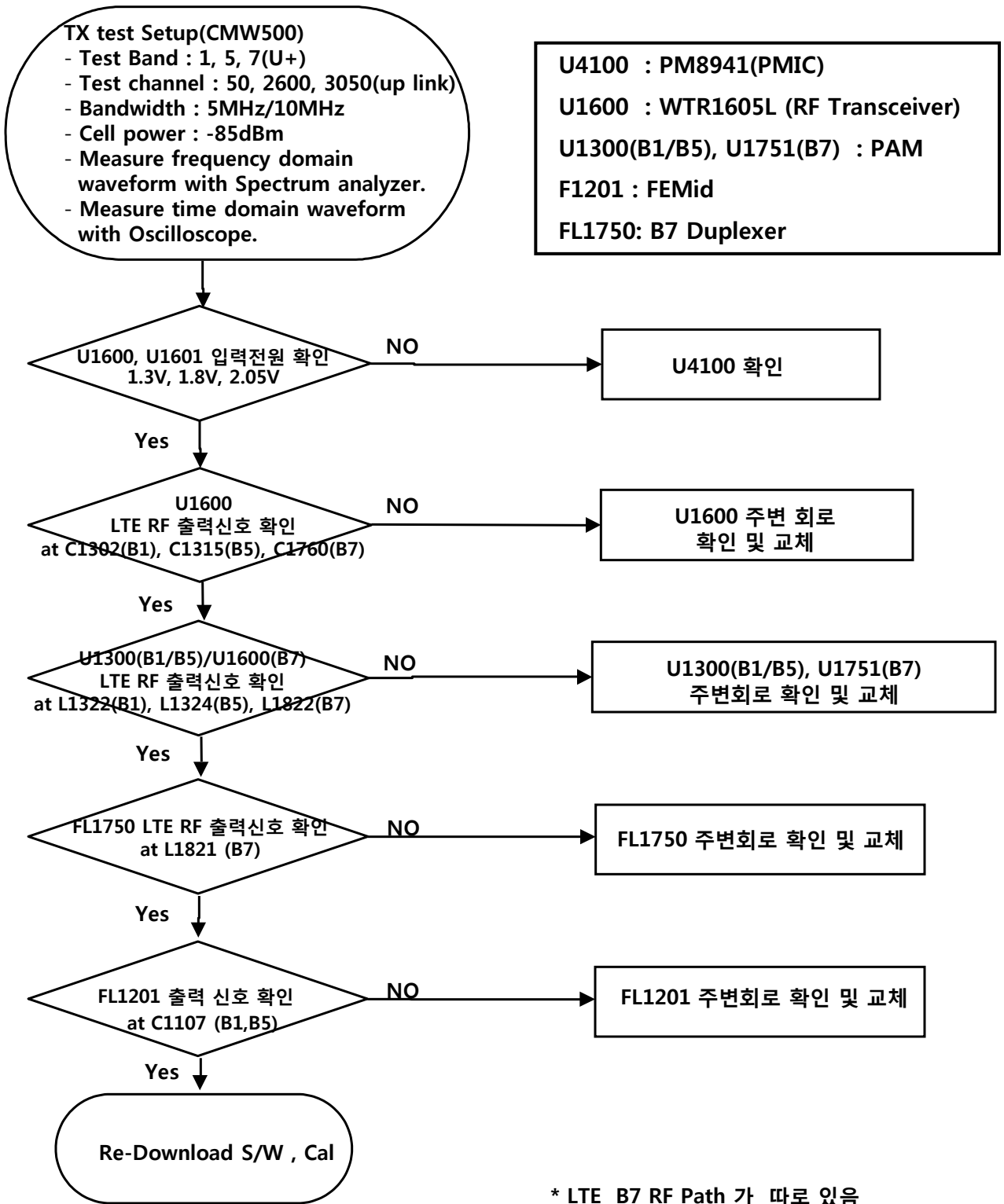
8. MP3 Sound 가 나오지 않을때



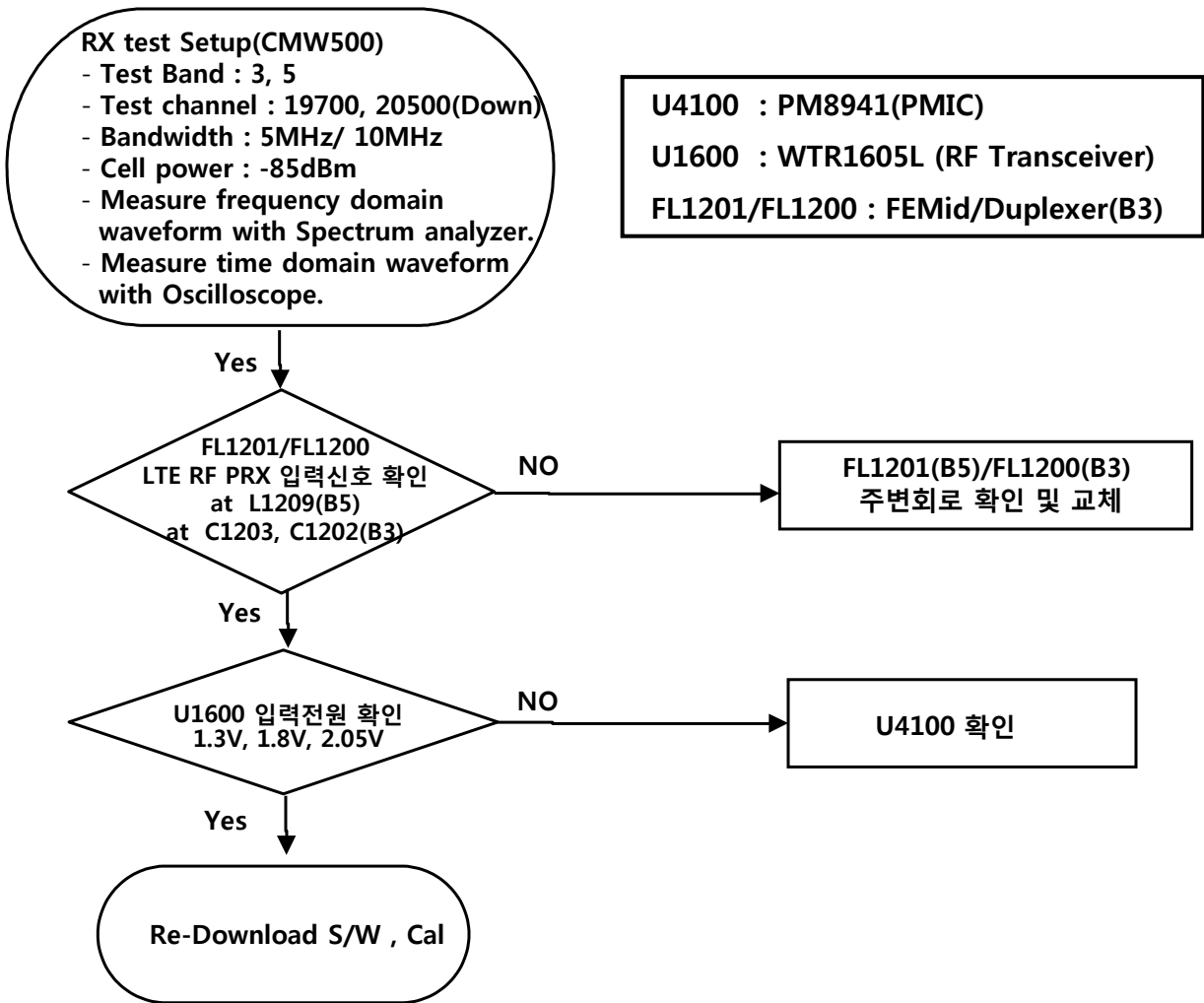
9-1. TX POWER가 나오지 않을 때 (LTE Tx, KT)



9-3. TX POWER가 나오지 않을 때 (LTE Tx, U+)

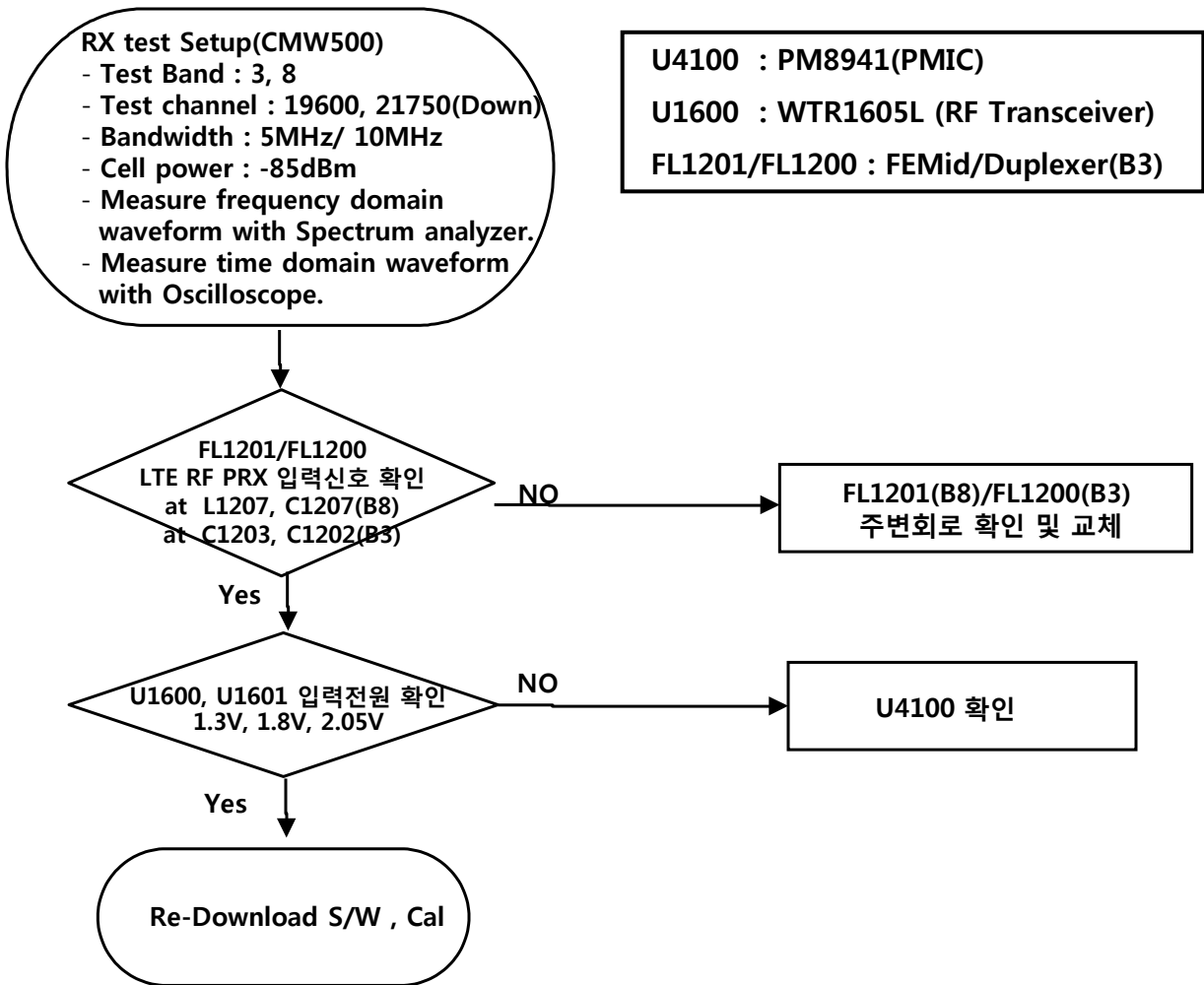


10-1. 수신감도가 좋지 않을 때 (LTE PRX, SKT)



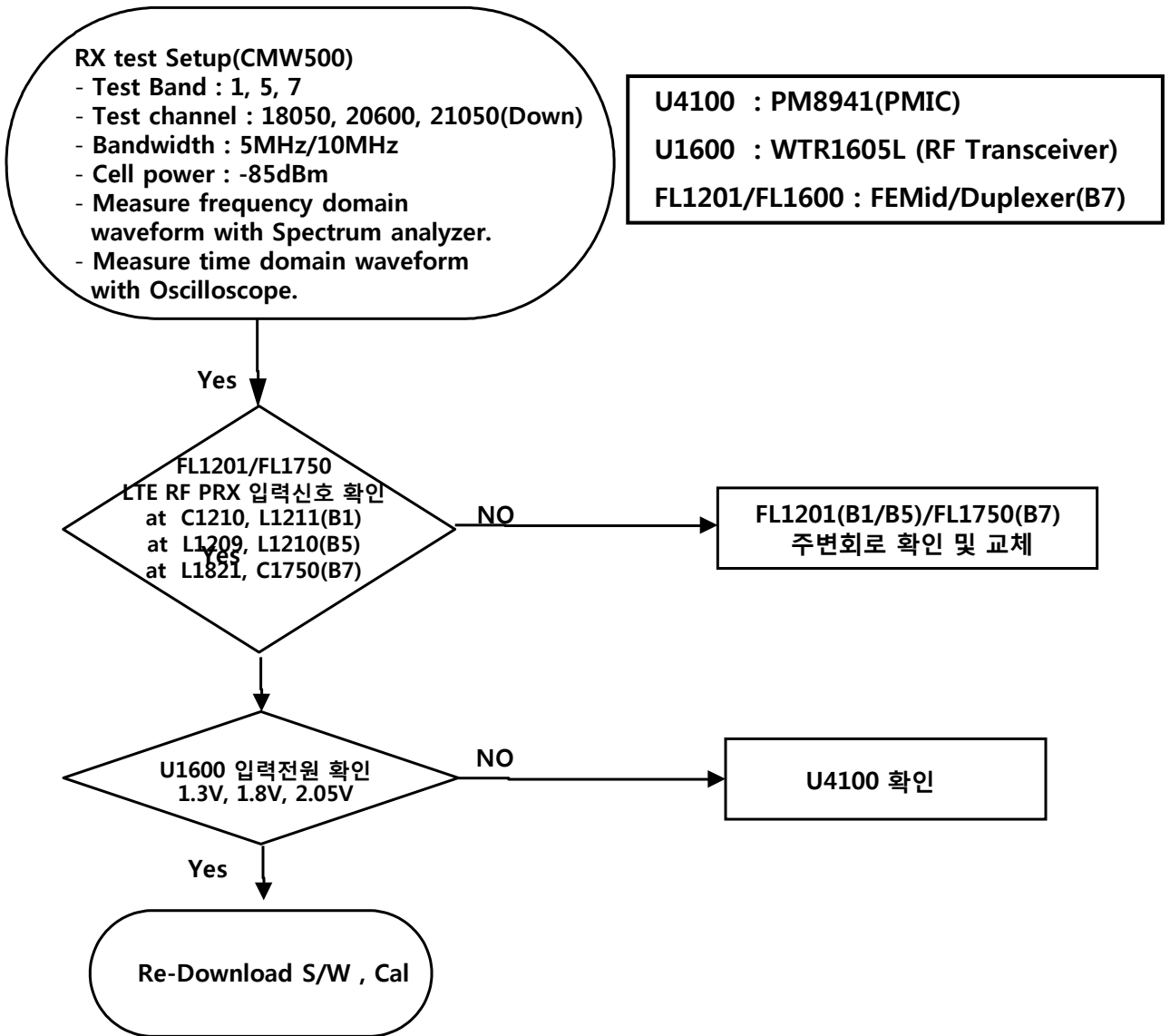
* LTE B3, B5 RF Path 가 서로 다름

10-2. 수신감도가 좋지 않을 때 (LTE PRX, KT)



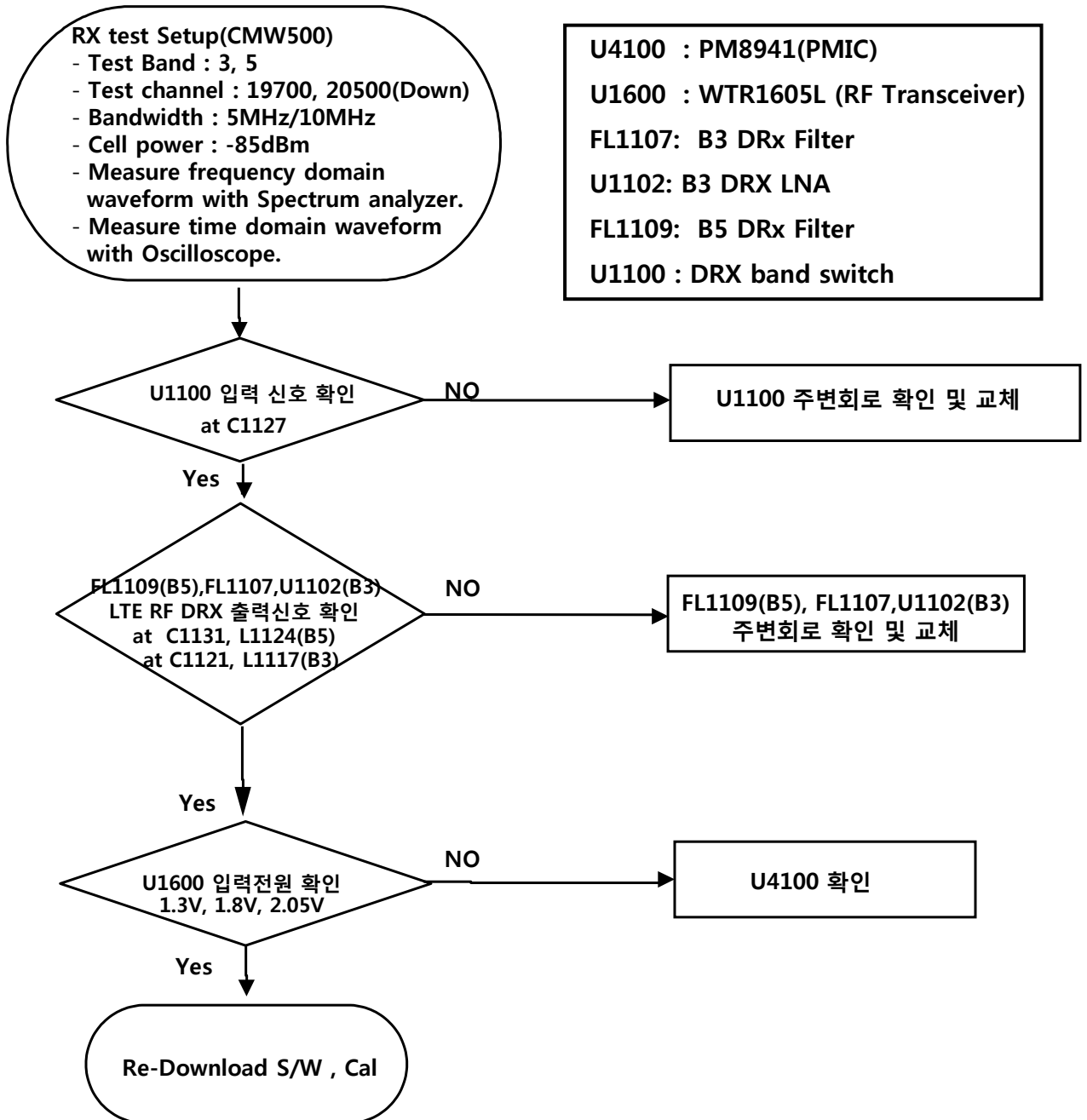
* LTE B3, B8 RF Path 가 서로 다름

10-3. 수신감도가 좋지 않을 때 (LTE PRX, U+)



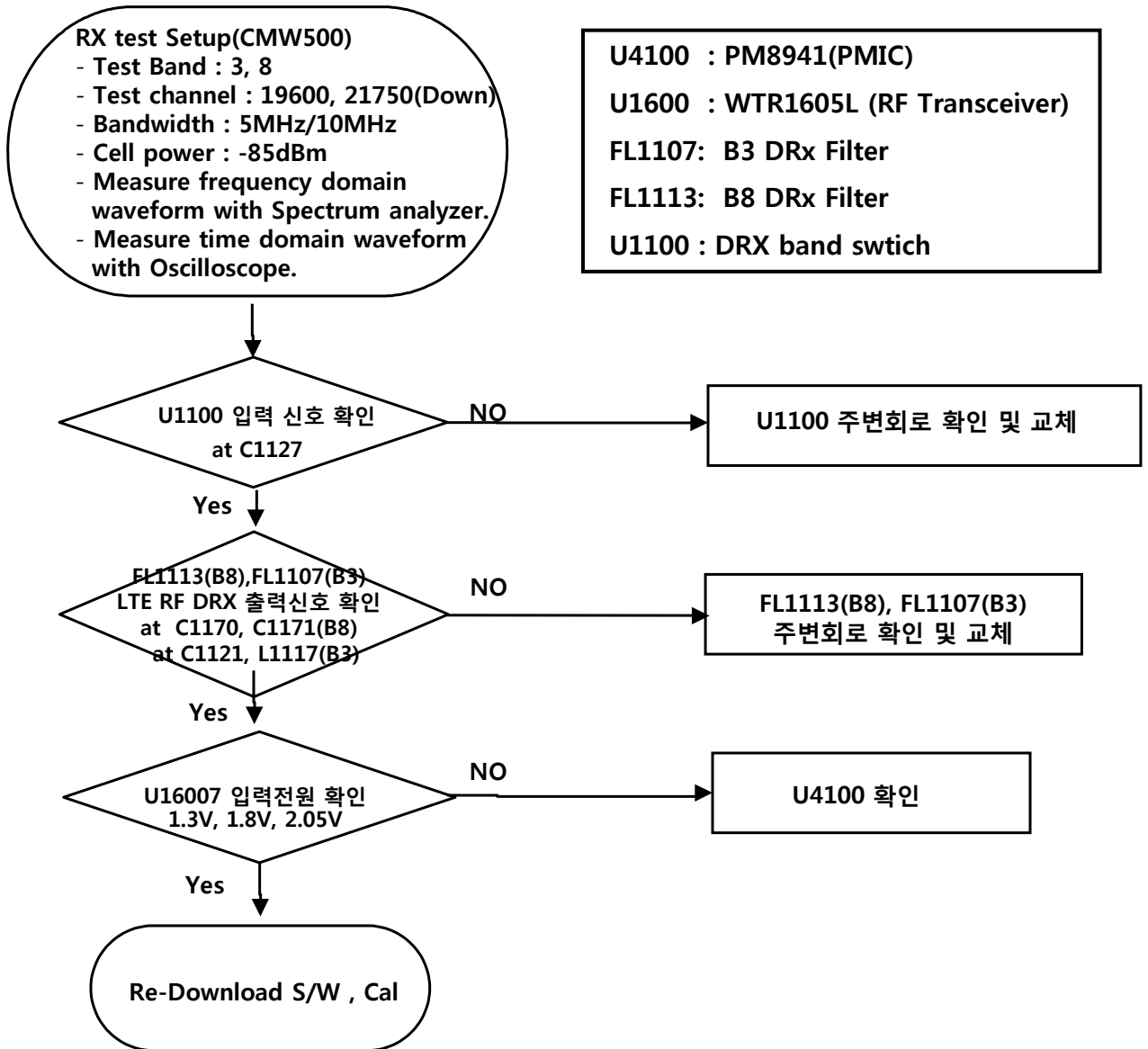
* LTE B1, B5, B7 RF Path 가 서로 다름

11-1. 수신감도가 좋지 않을 때 (LTE DRX, SKT)



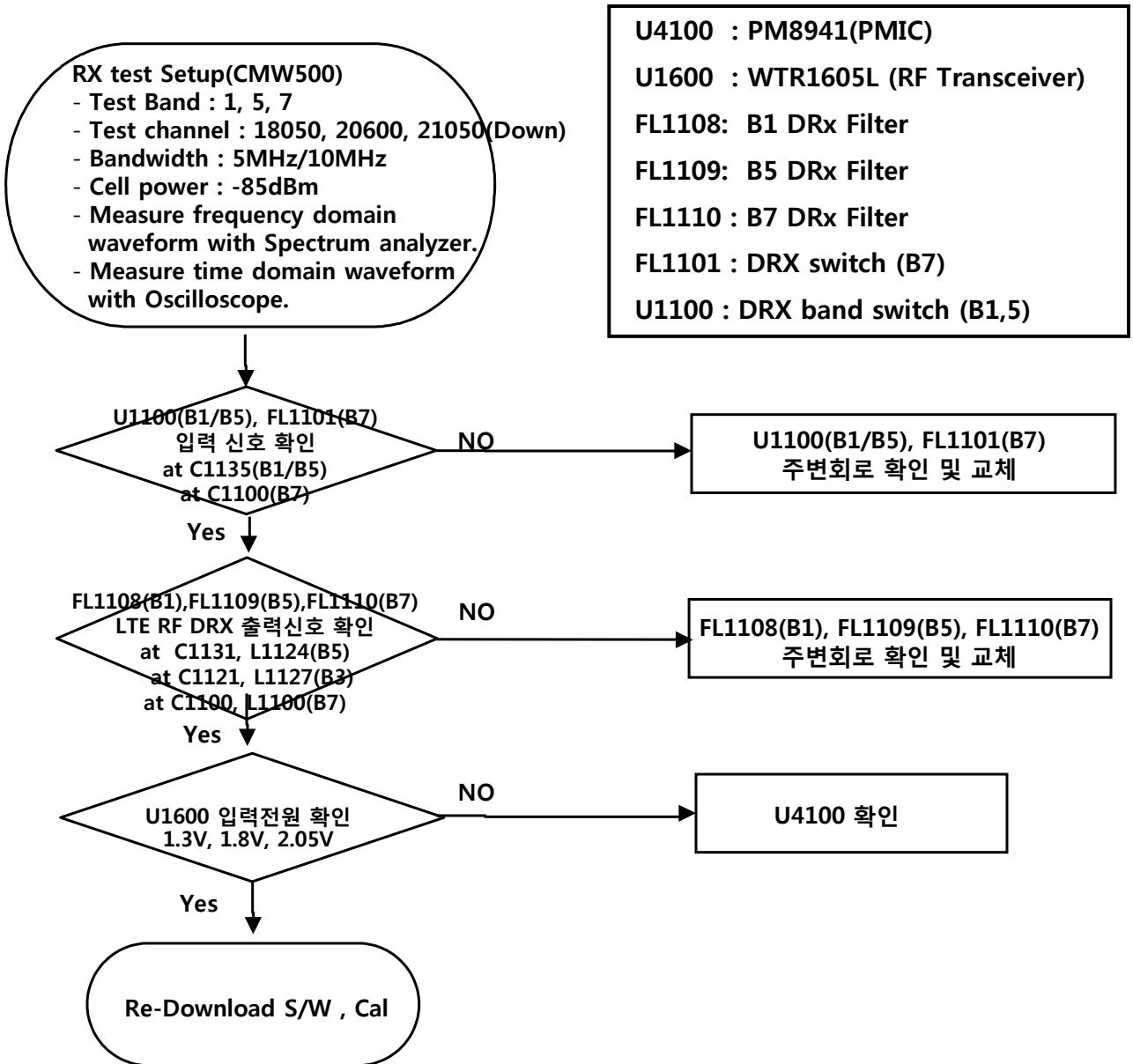
* LTE B1, B5 RF Path 가 서로 다름

11-2. 수신감도가 좋지 않을 때 (LTE DRX, KT)



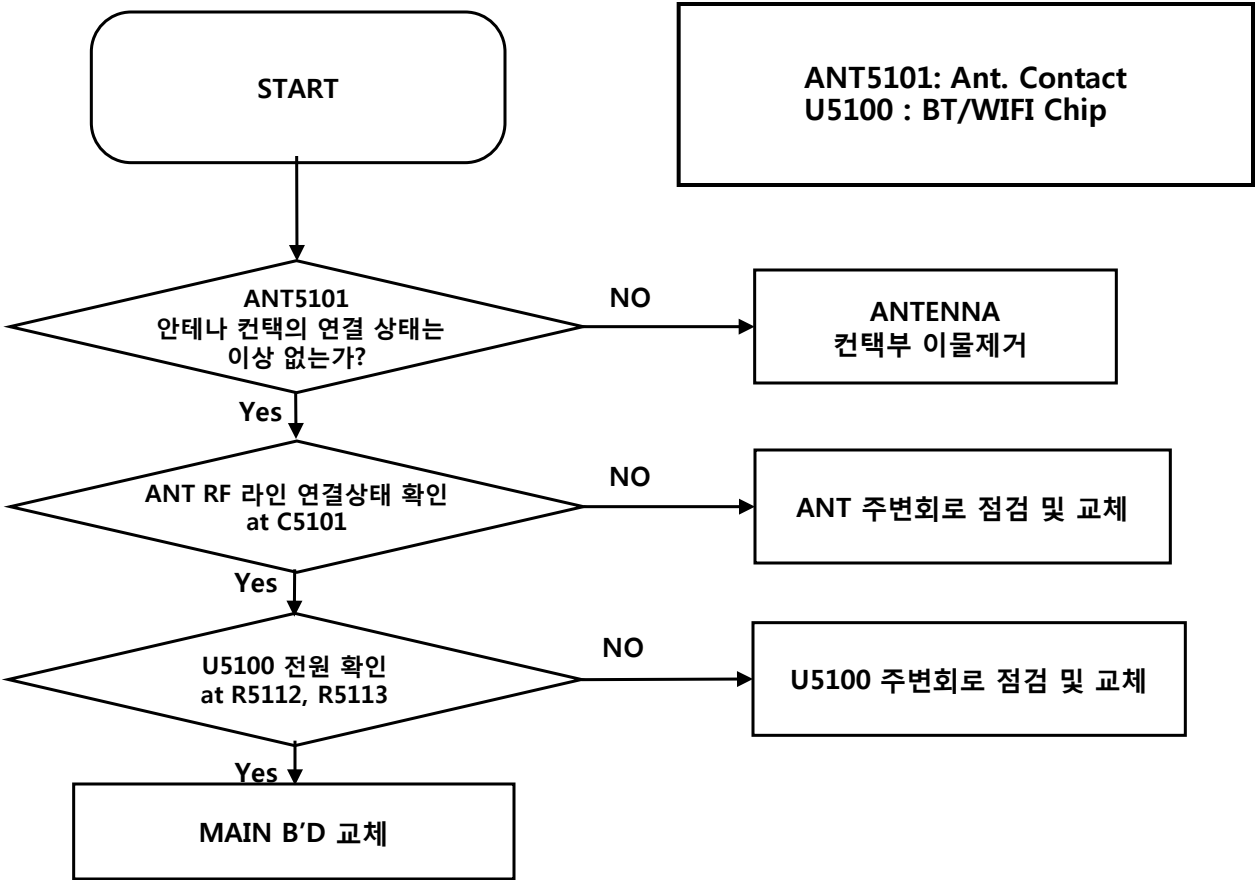
* LTE B1, B5 RF Path 가 서로 다름

11-3. 수신감도가 좋지 않을 때 (LTE DRX, U+)

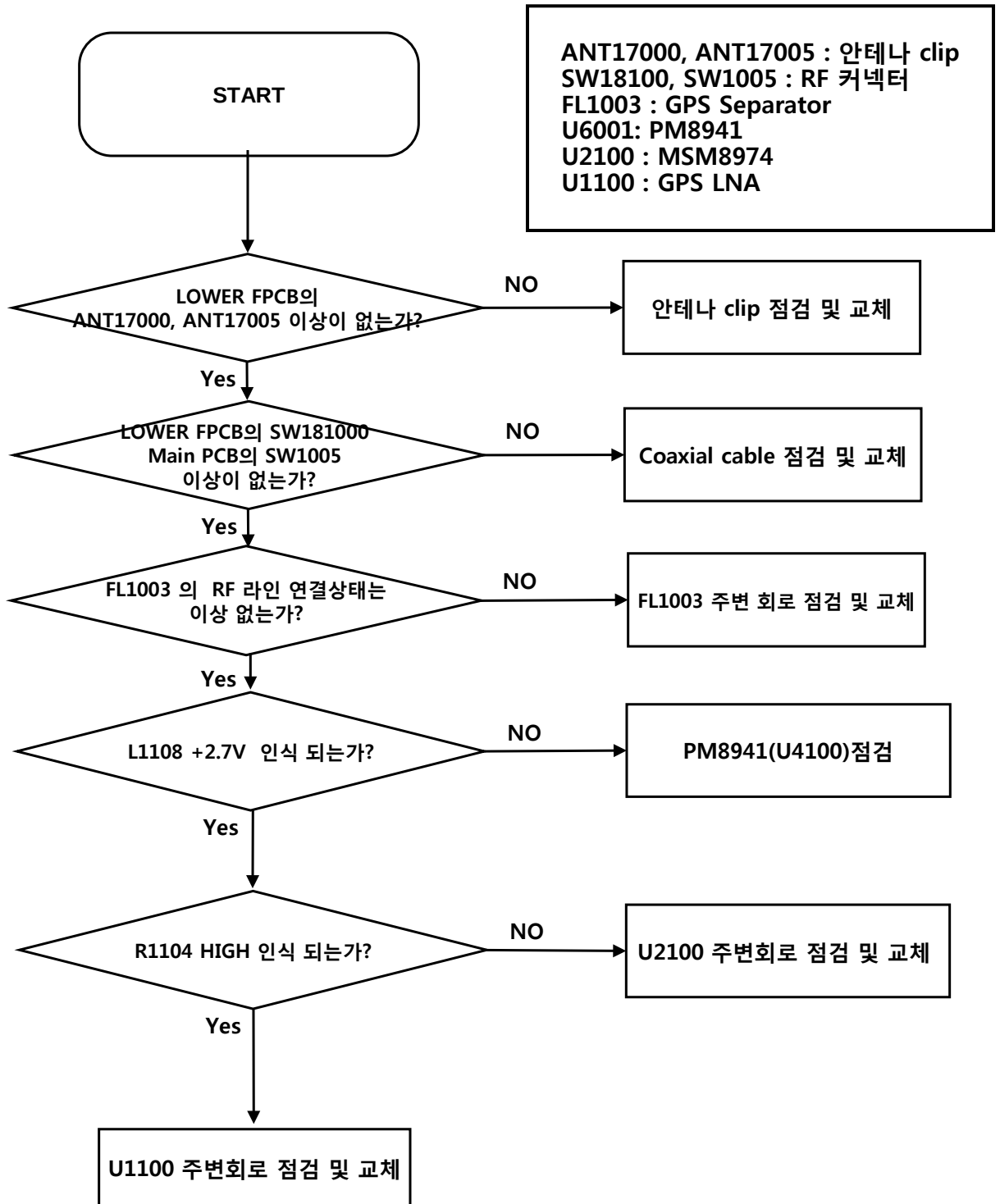


* LTE B1, B5, B7 RF Path 가 서로 다름

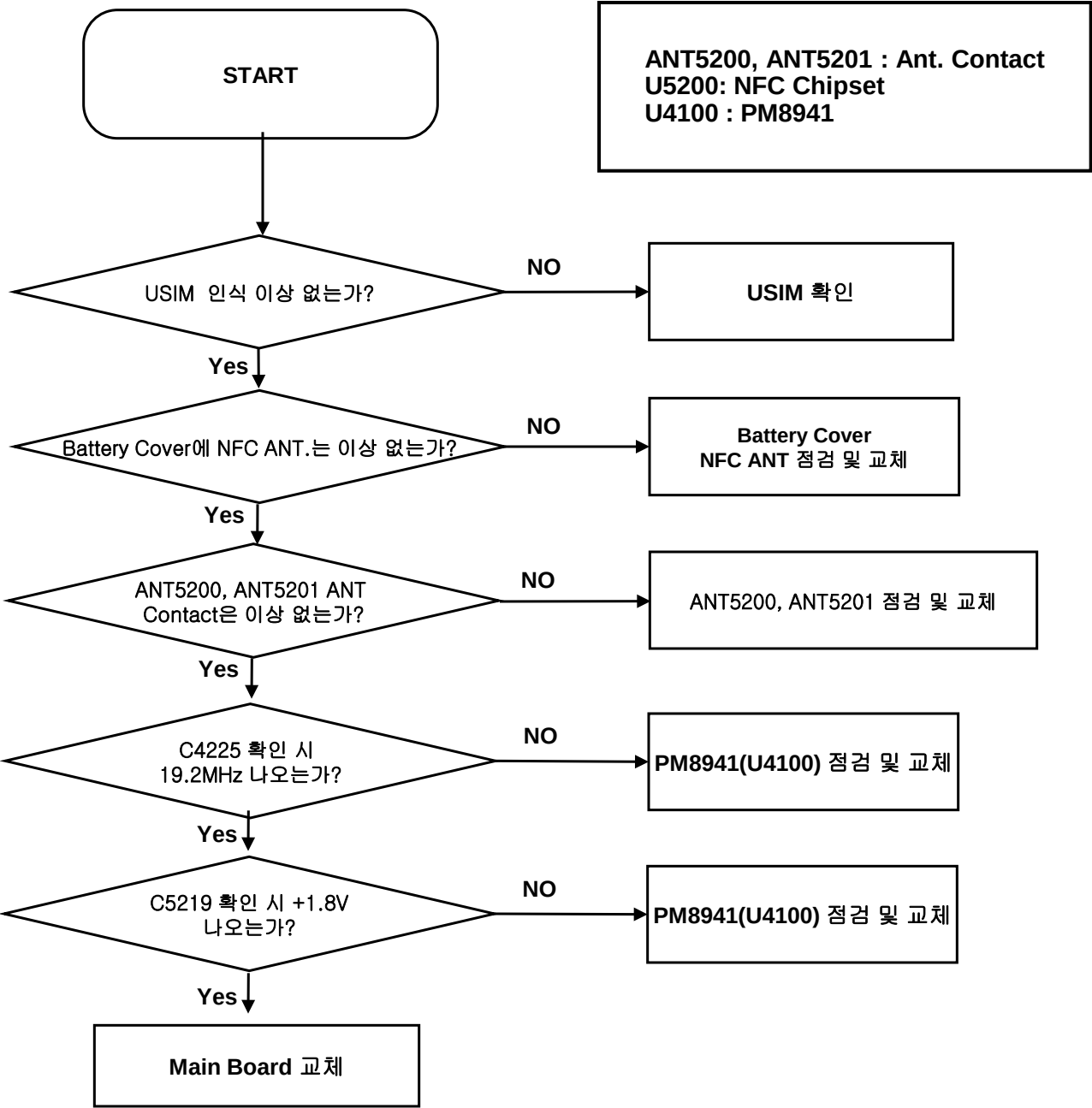
13. BT/WIFI 동작이 되지 않을 때



14. GPS 동작이 되지 않을 때



15. NFC 동작이 되지 않을 때



아. 부품목록

LG-F370L MAIN PCB

Part No	Description	Qty	Designator
EBR78519201 4	PCB Assembly,Main,SMT		
EBR78876901 129	PCB Assembly,Main,SMT Bottom	1	EBR071600
EAE62282201	Capacitor,Ceramic,Chip	1	C1330
EAE62286801	Capacitor,Ceramic,Chip	17	C1504,C1505,C1506,C1507,C1508,C1510,C1512,C1513,C1514,C1515,C1516,C1520,C1522,C1523,C5201,C5215,C9101
EAE62506501	Capacitor,Ceramic,Chip	4	C1328,C4168,C6105,C6109
EAE62685201	Capacitor,Ceramic,Chip	2	C4145,C4167
EAE62748401	Capacitor,TA,Conformal	1	C9100
EAE62762301	Capacitor,Ceramic,Chip	7	C4178,C4182,C4196,C4198,C5207,C5220,C9103
EAE62767801	Capacitor,Ceramic,Chip	2	C4136,C4138
EAE62946601	Capacitor(High Frequency),Ceramic,Chip	1	C5213
EAE62947001	Capacitor(High Frequency),Ceramic,Chip	3	C5118,C5226,C5227
EAE62962301	Capacitor,Ceramic,Chip	1	C6104
EAE63024201	Capacitor(High Frequency),Ceramic,Chip	2	C9504,C9505
EAE63042201	Capacitor(High Frequency),Ceramic,Chip	1	L1127
EAE63070001	Capacitor,Ceramic,Chip	1	C2387
EAF61450601	Varistor	1	VA6603
EAG63232601	Connector,BtoB	1	CN7100
EAG63310801	Card Socket	1	S9500
EAG63530401	Connector,Terminal Block	1	CN9100
EAG63730501	C-Clip	7	ANT1100,ANT1101,ANT1104,ANT1105,ANT1106,ANT1107,ANT1800
EAH62033201	Diode,TVS	2	VA8901,VA8902
EAM62230101	Filter,Bead	2	FB6601,FB6602
EAM62252001	Filter,Bead	1	L6814
EAM62570201	Filter,EMI/Power	3	FL7101,FL7102,FL7103
EAM62870101	Filter,Bead	1	FB6100
EAM62890001	Filter,LCR	5	FL7300,FL7301,FL7302,FL7400,FL7401
EAM62970201	Filter,Saw	1	FL1800
EAM63151101	Filter,Bead	2	L6810,L6811
EAN62415501	IC,Gate	1	U8950
EAN62496301	IC,LDO Voltage Regulator	3	U4103,U4104,U4105
EAN62632401	IC,NFC	1	U5200
EAN62637201	IC,Acceleration Sensor	1	U8100
EAN62669801	IC,LDO Voltage Regulator	1	U4102
EAN62691301	IC,Audio Codec	1	U6100
EAN62873001	IC,MCP,eMMC	1	U3200
EAP61866601	Inductor,Multilayer,Chip	4	L1105,L1108,L1115,L1140
EAP62225901	Inductor,Multilayer,Chip	2	C1810,C1818
EAP62226001	Inductor,Multilayer,Chip	1	C1107
EAP62226201	Inductor,Multilayer,Chip	1	L5103
EAP62227301	Inductor,Multilayer,Chip	1	C1133
EAP62286001	Inductor,Wire Wound,Chip	1	L6815
EAP62348201	Inductor,Multilayer,Chip	2	L1107,L1143
EAP62526401	Inductor,Multilayer,Chip	1	C1815
EAP62566801	Inductor,Multilayer,Chip	2	L5200,L5201
EAV62193601	LED,Chip	1	LD8950
EAV62372901	LED,Flash	1	LD5000
EAW61644701	Resonator,Ceramic	1	X5201
EBC61856101	Resistor,Chip	1	R8401
EBC62235801	Resistor,Chip	1	R9102

LG-F370L MAIN PCB

Part No	Description	Qty	Designator
EBC62235801	Resistor,Chip	1	R9102
EBC62575901	Resistor,Chip	1	R8953
EBK61691601	FET	1	Q5200
ECCH0000113	Capacitor,Ceramic,Chip	1	C1812
ECCH0000122	Capacitor,Ceramic,Chip	1	C9105
ECCH0000198	Capacitor,Ceramic,Chip	5	C2407,C3200,C3205,C7401,C7402
ECCH0004904	Capacitor,Ceramic,Chip	1	C7301
ECCH0007805	Capacitor,Ceramic,Chip	1	C1524
ECCH0009101	Capacitor,Ceramic,Chip	33	C2307,C2336,C2339,C2340,C2342,C2343,C2344,C2352,C2353,C2354,C2355,C2359,C2363,C2366,C2367,C2368,C2369,C2374,C2375,C2386,C2392,C2393,C2396,C3201,C3204,C3206,C6101,C6102,C6106,C7103,C8100,C8101,C8952
ECCH0009103	Capacitor,Ceramic,Chip	12	C1106,C1200,C1201,C1502,C1517,C1804,C1813,C5210,C5211,C5214,C9102,L1110
ECCH0009104	Capacitor,Ceramic,Chip	2	C1153,C9502
ECCH0009106	Capacitor,Ceramic,Chip	7	C2306,C2318,C2321,C2322,C2326,C2360,C2384
ECCH0009110	Capacitor,Ceramic,Chip	2	C2304,C2320
ECCH0009201	Capacitor,Ceramic,Chip	3	C2302,C2317,C2357
ECCH0009203	Capacitor,Ceramic,Chip	3	C2301,C2361,C4130
ECCH0009207	Capacitor,Ceramic,Chip	2	C2300,C2385
ECCH0009208	Capacitor,Ceramic,Chip	1	C1120
ECCH0009216	Capacitor,Ceramic,Chip	3	C1104,C1118,C1135
ECCH0009228	Capacitor,Ceramic,Chip	4	C2305,C2382,C2388,C6605
ECCH0009230	Capacitor,Ceramic,Chip	3	C2380,C2381,C2383
ECCH0017301	Capacitor,Ceramic,Chip	17	C2341,C2351,C2398,C2401,C4179,C4181,C4197,C4199,C5219,C5222,C7100,C7101,C7102,C7400,C8400,C8401,C9503
ECCH0017401	Capacitor,Ceramic,Chip	1	C10002
ECCH0017601	Capacitor,Ceramic,Chip	8	C1501,C2308,C2362,C7300,C7302,C7303,C8950,C8951
ECCH0032801	Capacitor,Ceramic,Chip	1	C2356
ECCH0034801	Capacitor,Ceramic,Chip	7	C2303,C2319,C2323,C2325,C2358,C2389,C5200
ECCH0042004	Capacitor,Ceramic,Chip	1	C2324
ECZH0000822	Capacitor,Ceramic,Chip	1	L1104
ECZH0000830	Capacitor,Ceramic,Chip	1	C10001
ECZH0000849	Capacitor,Ceramic,Chip	2	C6926,C6927
ECZH0001116	Capacitor,Ceramic,Chip	2	C5209,C5212
ECZH0001215	Capacitor,Ceramic,Chip	4	C6103,C6107,C6108,C9501
ECZH0001217	Capacitor,Ceramic,Chip	1	C5217
ECZH0003103	Capacitor,Ceramic,Chip	1	C5223
ECZH0025916	Capacitor,Ceramic,Chip	2	C6811,C6812
ECZH0025917	Capacitor,Ceramic,Chip	2	C5208,C5216
ECZH0025920	Capacitor,Ceramic,Chip	3	C5204,C5218,C5225
EDNY0013602	Diode,Zener	1	ZD9101
EDTY0012102	Diode,TVS	1	D6600
ELCH0001036	Inductor,Multilayer,Chip	1	C1146
ELCH0001040	Inductor,Multilayer,Chip	1	C1151
ELCH0001403	Inductor,Multilayer,Chip	1	L1144
ELCH0003806	Inductor,Wire Wound,Chip	2	L9000,L9001
ELCH0003815	Inductor,Multilayer,Chip	1	C1103
ELCH0003831	Inductor,Multilayer,Chip	1	L1131
ELCH0003832	Inductor,Multilayer,Chip	3	C1134,R1116,R1117

LG-F370L MAIN PCB

Part No	Description	Qty	Designator
ELCH0003839	Inductor,Multilayer,Chip	1	L1544
ELCH0003847	Inductor,Multilayer,Chip	1	C1117
ELCH0004714	Inductor,Multilayer,Chip	1	L1128
ENBY0034201	Connector,BtoB	1	CN7300
ENBY0036001	Connector,BtoB	1	CN7200
ENBY0039601	Connector,BtoB	1	CN7400
ENBY0040701	Connector,BtoB	1	CN10000
ENWY0003901	Connector,RF	2	SW1101,SW1106
ENWY0008701	Connector,RF	5	SW1100,SW1102,SW1103,SW1104,SW1105
EQBN0020501	TR,Bipolar	2	Q8950,Q8951
ERHY0009301	Resistor,Chip	1	R8952
ERHY0009302	Resistor,Chip	2	R8954,R8955
ERHY0009502	Resistor,Chip	1	R9504
ERHY0009503	Resistor,Chip	3	R9710,R9711,R9712
ERHY0009504	Resistor,Chip	2	R5203,R5206
ERHY0009507	Resistor,Chip	4	R5200,R7201,R7202,R9501
ERHY0009522	Resistor,Chip	2	R2213,R2214
ERHY0009526	Resistor,Chip	3	R6600,R6601,R8400
ERHY0009527	Resistor,Chip	1	R9302
ERHY0009536	Resistor,Chip	2	R4130,R8951
ERHY0009543	Resistor,Chip	1	R9104
ERHY0009544	Resistor,Chip	1	R8950
ERHY0035601	Resistor,Chip	1	R9105
ERHY0042402	Resistor,Chip	1	R9500
ERHZ0000222	Resistor,Chip	1	R9101
ERHZ0000237	Resistor,Chip	1	R6105
ERHZ0000286	Resistor,Chip	1	R9103
ERHZ0000405	Resistor,Chip	1	R3208
MBV62321701	Clip	4	SC10003,SC20003,SC20006,SC20008
MBV62562101	Clip	2	CN5200,CN5202
SAFP0000401	Wire Pad,Short	1	R5201
SEVY0003601	Varistor	16	D8950,VA6601,VA6810,VA6811,VA6924,VA7100,VA7101,VA7102,VA7103,VA7204,VA7303,VA7404,VA9501,VA9710,VA9711,VA9712
SEVY0005101	Varistor	7	VA9500,VA9505,VA9506,VA9507,VA9508,VA9509,VA9510
SEVY0005402	Varistor	2	VA9100,ZD9100
SEVY0008101	Varistor	1	VA8903
SEVY0008102	Varistor	12	VA6602,VA6604,VA6925,VA7300,VA7301,VA7400,VA7401,VA7402,VA7403,VA9502,VA9503,VA9504
SFBH0008101	Filter,Bead	1	FB7201
SFBH0008102	Filter,Bead	1	FB6600
EBR78877001 148	PCB Assembly,Main,SMT Top	1	EBR071700
EAB62911301	Microphone,Condenser	1	MIC6921
EAE62282201	Capacitor,Ceramic,Chip	4	C1102,C1143,C1318,C1327
EAE62286801	Capacitor,Ceramic,Chip	6	C1401,C1511,C1518,C1519,C1521,C2100
EAE62502901	Capacitor,Ceramic,Chip	9	C1319,C1400,C1402,C1710,C1766,C1809,C4169,C4171,C41970
EAE62506401	Capacitor,Ceramic,Chip	1	C1113
EAE62506501	Capacitor,Ceramic,Chip	1	C5102
EAE62522101	Capacitor,Ceramic,Chip	1	C4172
EAE62726601	Capacitor,Ceramic,Chip	3	C1707,C7405,C7406
EAE62762301	Capacitor,Ceramic,Chip	5	C4154,C4164,C4165,C41973,C6421

LG-F370L MAIN PCB

Part No	Description	Qty	Designator
EAE62762501	Capacitor,Ceramic,Chip	1	C4163
EAE62927201	Capacitor,Ceramic,Chip	1	C41972
EAE62945801	Capacitor(High Frequency),Ceramic,Chip	4	C1152,C1331,L1709,L1810
EAE62945901	Capacitor(High Frequency),Ceramic,Chip	1	L1812
EAE62946001	Capacitor(High Frequency),Ceramic,Chip	2	L1208,L1317
EAE62946201	Capacitor(High Frequency),Ceramic,Chip	1	C1165
EAE62946401	Capacitor(High Frequency),Ceramic,Chip	2	C1797,C5117
EAE62946601	Capacitor(High Frequency),Ceramic,Chip	2	C1307,L1325
EAE62946901	Capacitor(High Frequency),Ceramic,Chip	1	C1750
EAE62962201	Capacitor(High Frequency),Ceramic,Chip	2	L1758,L1808
EAE62962301	Capacitor,Ceramic,Chip	7	C10003,C1329,C4173,C4174,C4175,C4176,C4177
EAE62964001	Capacitor(High Frequency),Ceramic,Chip	1	L1756
EAE62986101	Capacitor,Ceramic,Chip	1	C4183
EAE63070001	Capacitor,Ceramic,Chip	1	C5116
EAE63070101	Capacitor,Ceramic,Chip	1	C1403
EAG63652201	C-Clip	3	ANT1102,ANT1109,ANT1110
EAM62471001	Filter,Bead	1	FB1800
EAM62632601	Filter,Duplexer	1	FL1200
EAM62633001	Filter,Saw	1	FL1112
EAM62673301	Filter,Separator,Switch	1	U1100
EAM62691501	Filter,Ceramic	1	FL1301
EAM62730001	Filter,Separator,Switch	1	FL1101
EAM62732801	Filter,Saw	1	FL1109
EAM62732901	Filter,Saw	1	FL1113
EAM62771001	Filter,Saw	1	FL1108
EAM62850001	Filter,Saw	1	FL1107
EAM62930701	Filter,Saw	1	FL1100
EAM63190001	Filter,Duplexer	1	FL1750
EAN62357301	IC,Hall Effect Switch	1	U8700
EAN62512901	IC,LDO Voltage Regulator	1	U4106
EAN62578201	IC,Analog Switch	1	U6420
EAN62581401	IC,RF Amplifier	1	U1101
EAN62646301	IC,Proximity	1	U8400
EAN62697301	IC,RF Transceiver,4G	1	U1500
EAN62698901	IC,WiFi	1	U5100
EAN62739601	IC,PMIC	1	U4100
EAN62765901	IC,Power Amplifier	1	U1751
EAN62788501	IC,DC,DC Converter	1	U1400
EAN62928201	IC,Digital Baseband Processor,4G	1	U2100
EAN62949701	IC,Mobile SDRAM	1	U3100
EAN62996101	IC,Capacitive Touch Sensor	1	U7300
EAN63126001	IC,Power Amplifier	1	U1300
EAP61747501	Inductor,Multilayer,Chip	3	C1192,C1202,L1817
EAP61767701	Inductor,Multilayer,Chip	3	C1218,L1117,L1135
EAP61987001	Inductor,Multilayer,Chip	1	L1207
EAP62106301	Inductor,Wire Wound,Chip	1	L4136
EAP62107901	Inductor,Multilayer,Chip	1	L1102
EAP62108001	Inductor,Multilayer,Chip	8	C1203,C1705,L1119,L1137,L1200,L1304,L1322,L1821
EAP62108101	Inductor,Multilayer,Chip	2	C1703,L1822
EAP62108201	Inductor,Multilayer,Chip	3	C1310,C1711,L1147
EAP62108301	Inductor,Multilayer,Chip	2	L1149,L1150

LG-F370L MAIN PCB

Part No	Description	Qty	Designator
EAP62108501	Inductor,Multilayer,Chip	2	L1303,L1316
EAP62108701	Inductor,Multilayer,Chip	1	L1112
EAP62187401	Inductor,Wire Wound,Chip	1	L4135
EAP62225901	Inductor,Multilayer,Chip	4	L1100,L1305,L1760,L1806
EAP62226001	Inductor,Multilayer,Chip	1	C1775
EAP62226101	Inductor,Multilayer,Chip	3	L1121,L1211,L1820
EAP62226201	Inductor,Multilayer,Chip	2	C1128,L1210
EAP62226401	Inductor,Multilayer,Chip	1	L1711
EAP62226501	Inductor,Multilayer,Chip	2	L1138,L1209
EAP62226901	Inductor,Multilayer,Chip	2	L1153,L1154
EAP62227301	Inductor,Multilayer,Chip	2	L1216,L1816
EAP62227501	Inductor,Multilayer,Chip	3	C1325,L1220,L1323
EAP62227601	Inductor,Multilayer,Chip	2	L1126,L1823
EAP62227701	Inductor,Multilayer,Chip	2	L1124,L1700
EAP62245901	Inductor,Multilayer,Chip	1	L1219
EAP62286801	Inductor,Wire Wound,Chip	1	L1400
EAP62307301	Inductor,Wire Wound,Chip	2	L4130,L4131
EAP62347101	Inductor,Multilayer,Chip	1	L1146
EAP62347201	Inductor,Multilayer,Chip	1	L1807
EAP62347701	Inductor,Multilayer,Chip	1	L1141
EAP62347801	Inductor,Multilayer,Chip	1	L1136
EAP62447001	Inductor,Multilayer,Chip	1	L1132
EAP62447101	Inductor,Multilayer,Chip	2	L1134,L1753
EAP62447201	Inductor,Multilayer,Chip	1	L1133
EAP62447401	Inductor,Multilayer,Chip	1	L2300
EAP62526501	Inductor,Wire Wound,Chip	2	L4132,L4133
EAP62526601	Inductor,Wire Wound,Chip	1	L4134
EAT61876301	Module,Rx Module	1	FL1201
EAW61883401	Crystal	1	X4100
EAX65551301	PCB,Main	1	EAX010000
EBC61856201	Resistor,Chip	2	R2101,R2103
EBC61997701	Resistor,Chip	1	R6924
EBC62036001	Resistor,Chip	1	R1105
EBC62115901	Resistor,Chip	1	R1500
EBC62236101	Resistor,Chip	1	R1104
EBC62236701	Resistor,Chip	1	R1503
EBC62581801	Resistor,Chip	1	R2110
EBF61974601	Switch,Tact	3	SW9710,SW9711,SW9712
EBG61306601	Thermistor,NTC	1	PT1101
ECCH0000122	Capacitor,Ceramic,Chip	1	C5110
ECCH0000127	Capacitor,Ceramic,Chip	1	C5104
ECCH0000155	Capacitor,Ceramic,Chip	1	C4131
ECCH0000182	Capacitor,Ceramic,Chip	1	C4132
ECCH0000198	Capacitor,Ceramic,Chip	2	C1763,C2400
ECCH0002001	Capacitor,Ceramic,Chip	1	C6922
ECCH0004904	Capacitor,Ceramic,Chip	2	C4200,C4201
ECCH0007802	Capacitor,Ceramic,Chip	2	C4142,C4143
ECCH0007805	Capacitor,Ceramic,Chip	3	C41971,C5113,C5114
ECCH0009101	Capacitor,Ceramic,Chip	41	C1150,C2101,C2310,C2311,C2312,C2313,C2314,C2315,C2316,C2328,C2329,C2330,C2331,C2332,C2333,C2334,C2337,C2338,C2345,C2347,C2348,C2349,C2350,C2364,C2370,C2371,C2376,C2377,C2379,C2390,C2391,C2395,C2397,C2404,C2405,C4106,C4166,C7404,C7407,C8700,C8701

LG-F370L MAIN PCB

Part No	Description	Qty	Designator
ECCH0009103	Capacitor,Ceramic,Chip	36	C1100,C1108,C1111,C1112,C1121,C1131,C1138,C1139,C1140,C1141,C1145,C1148,C1149,C1155,C1160,C1164,C1169,C1170,C1207,C1315,C1322,C1771,C1778,C1787,C1789,C1790,C1791,C1792,C1793,C1794,C1795,C1796,C1806,C1807,L1324,L1755
ECCH0009104	Capacitor,Ceramic,Chip	8	C1127,C1162,C1171,C1196,C1210,C1225,C1227,C1712
ECCH0009105	Capacitor,Ceramic,Chip	1	C4202
ECCH0009106	Capacitor,Ceramic,Chip	6	C1168,C1801,C1802,C1803,C1805,C6601
ECCH0009109	Capacitor,Ceramic,Chip	4	C1708,C1709,C1764,C1765
ECCH0009208	Capacitor,Ceramic,Chip	5	C1190,C1191,C1405,L1302,L1331
ECCH0009209	Capacitor,Ceramic,Chip	1	C5115
ECCH0009211	Capacitor,Ceramic,Chip	1	C1163
ECCH0009216	Capacitor,Ceramic,Chip	3	C1302,C1321,C1760
ECCH0009502	Capacitor,Ceramic,Chip	1	L1754
ECCH0009504	Capacitor,Ceramic,Chip	1	C1700
ECCH0009520	Capacitor,Ceramic,Chip	2	C1105,C1753
ECCH0017301	Capacitor,Ceramic,Chip	24	C1500,C2309,C2327,C2335,C2365,C2373,C2399,C2406,C4147,C4152,C4153,C4155,C4159,C4180,C4184,C4185,C4187,C4188,C4189,C4190,C4191,C4192,C4193,C4195
ECCH0017501	Capacitor,Ceramic,Chip	3	C4133,C4134,C4135
ECCH0017601	Capacitor,Ceramic,Chip	10	C4148,C4149,C4150,C4151,C4156,C4157,C4160,C4161,C4162,C4194
ECZH0001210	Capacitor,Ceramic,Chip	1	C4146
ECZH0001217	Capacitor,Ceramic,Chip	2	C5100,C5101
ECZH0025911	Capacitor,Ceramic,Chip	1	C1142
ECZH0025916	Capacitor,Ceramic,Chip	7	C1195,C1313,C1539,C1759,C4108,C6604,C6923
ECZH0025917	Capacitor,Ceramic,Chip	1	C1208
ECZH0025920	Capacitor,Ceramic,Chip	2	C1541,C4100
EDSY0018601	Diode,Switching	1	ZD4130
ELCH0001425	Inductor,Multilayer,Chip	2	L5101,L5102
ELCH0001431	Inductor,Multilayer,Chip	1	L5100
ERHY0009302	Resistor,Chip	1	R6602
ERHY0009505	Resistor,Chip	4	R2202,R2215,R4104,R4142
ERHY0009507	Resistor,Chip	2	R4150,R4151
ERHY0009508	Resistor,Chip	1	R6003
ERHY0009522	Resistor,Chip	6	R2207,R2208,R2209,R2210,R2211,R2212
ERHY0009536	Resistor,Chip	2	R1112,R4106
ERHY0009543	Resistor,Chip	2	R1501,R1502
ERHY0009547	Resistor,Chip	1	R4113
ERHY0017901	Resistor,Chip	1	R6923
ERHZ0000235	Resistor,Chip	1	R2100
EUSY0365401	IC,RF Amplifier	1	U1102
MBV62321701	Clip	10	SC10001,SC10006,SC10007,SC10008,SC10009,SC10011,SC10012,SC20001,SC20004,SC20005
SAFO0000401	Wire Pad,Open	1	R7402
SAFP0000401	Wire Pad,Short	1	R7302
SFBH0008102	Filter,Bead	1	FB6921
MEZ65049701	Label	1	MEZ000000
SAD34429401	Software,Mobile	1	SAD010000

LG-F370L MAIN PCB

• F370 Main Board BOM 사업자별 상이 List

	F370L	F370S	F370K	SIDE	비고
R1114	DNI	ELCH0003832	DNI	BOT	사업자구분 BOM 반영 완료
R1115	DNI	DNI	DNI	BOT	
R1116	ELCH0003832	DNI	DNI	BOT	
R1117	ELCH0003832	ELCH0003832	ELCH0003832	BOT	
C1313	ECZH0025916	ECZH0025916	EAP62226101	TOP	BOM 반영 완료
C1315	ECCH0009103	ECCH0009103	EAP62108201	TOP	BOM 반영 완료
C1810	EAP62225901	EAP62225901	EAP62546201	BOT	BOM 반영 완료

LG-F370L Lower FPCB

Part No	Description	Qty	Designator
EBR78480801	PCB Assembly,Flexible		
EBR78481001 2	PCB Assembly,Flexible,SMT	1	EBR070400
EBR78519901 28	PCB Assembly,Flexible,SMT Bottom	1	EBR070200
EAB62830801	Microphone,Condenser	1	MIC1
EAE62685301	Capacitor,Ceramic,Chip	1	C20
EAE62945301	Capacitor(High Frequency),Ceramic,Chip	1	C4
EAE62945901	Capacitor(High Frequency),Ceramic,Chip	1	C11
EAG63090001	Connector,I/O	1	CN4
EAG63393201	Connector,BtoB	1	CN1
EAG63730501	C-Clip	4	ANT1,ANT2,ANT3,ANT4
EAH61693001	Diode,TVS	2	D4,D5
EAH61872601	Diode,TVS	1	D6
EAH61995401	Diode,TVS	2	D2,D3
EAM62272401	Filter,EMI/Power	1	FL2
EAP62225901	Inductor,Multilayer,Chip	1	C10
ECCH0009101	Capacitor,Ceramic,Chip	1	C17
ECCH0009216	Capacitor,Ceramic,Chip	1	C19
ECCH0017401	Capacitor,Ceramic,Chip	1	C21
ECZH0000813	Capacitor,Ceramic,Chip	1	C2
ECZH0000830	Capacitor,Ceramic,Chip	1	C8
ECZH0025916	Capacitor,Ceramic,Chip	5	C13,C14,C15,C16,C3
EDTY0009101	Diode,TVS	2	ZD1,ZD2
ELCH0001425	Inductor,Multilayer,Chip	2	L4,L5
ELCH0003835	Inductor,Multilayer,Chip	1	C9
ENWY0003901	Connector,RF	2	SW1,SW2
ERHY0009501	Resistor,Chip	1	R3
ERHY0009503	Resistor,Chip	1	R5
ERHY0009527	Resistor,Chip	1	R4
SEVY0008101	Varistor	3	VA1,VA2,VA3
SFBH0008102	Filter,Bead	1	FB1
SFEY0015301	Filter,EMI/Power	1	FL1
EBR78520001 2	PCB Assembly,Flexible,SMT Top	1	EBR070300
EAX65691401	PCB,Flexible	1	EAX010700
ENBY0040601	Connector,BtoB	1	CN3

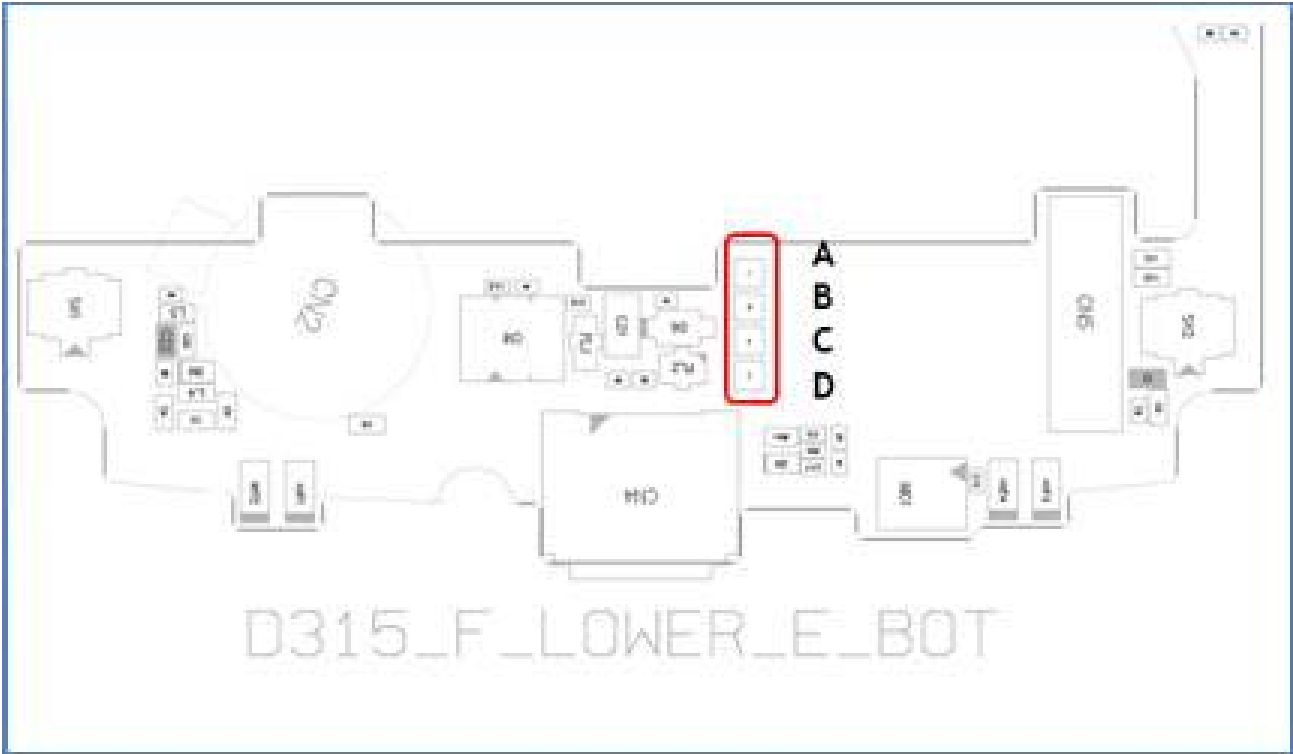
LG-F370L Lower FPCB

F370 Lower FPCB BOM 사업자별 상이 List

	F370L	F370S	F370K	SIDE	비고
C9	ELCH0003835	ELCH0003835	ELCH0003826	BOT	BOM 반영 완료

TP_INDEX_OPEN (Solder) = “1” = 납 올라감.
TP_INDEX_CLOSE = “0” = 납 안올라감.

A	B	C	D	
1	0	0	0	F370K
1	1	0	0	F370L/S



LG-F370L HOME Key FPCB

Part No	Description	Qty	Designator
EBR78575701 2	PCB Assembly,Flexible		
EBR78515901 2	PCB Assembly,Flexible,Insert	1	EBR070100
ABH74779701	Button Assembly	1	ABH000000
MJN68692701	Tape	1	MJN000000
EBR78516001 2	PCB Assembly,Flexible,SMT	1	EBR070400
EBR78516101 2	PCB Assembly,Flexible,SMT Bottom	1	EBR070200
EAG63393301	Connector,BtoB	1	EAG020000
EBF61955001	Switch,Tact	1	EBF120000
EBR78516201	PCB Assembly,Flexible,SMT Top	1	EBR070300
EAX65608701	PCB,Flexible	1	EAX010700

