LG

Service Manual

LG

Service Manual

KE800

Model : KE800

Date: January, 2007 / Issue 1.0

REVISED HISTORY

DATE	ISSUE	CONTENTS OF CHANGES	S/W VERSION
13 DEC 2006	ISSUE 1	Initial Release	

The information in this manual is subject to change without notice and should not be construed as a commitment by LGE Inc. Furthermore, LGE Inc. reserves the right, without notice, to make changes to equipment design as advances in engineering and manufacturing methods warrant.

This manual provides the information necessary to install, program, operate and maintain the KE800.

Table Of Contents

1. INTRODUCTION

1.1 Purpose

This manual provides the information necessary to repair, calibration, description and download the features of the KE800.

1.2 Regulatory Information

A. Security

Toll fraud, the unauthorized use of telecommunications system by an unauthorized part (for example, persons other than your company's employees, agents, subcontractors, or person working on your company's behalf) can result in substantial additional charges you're your telecommunications services. System users are responsible for the security of own system. There are may be risks of toll fraud associated with your telecommunications system. System users are responsible for programming and configuring the equipment to prevent unauthorized use. LGE does not warrant that this product is immune from the above case but will prevent unauthorized use of common-carrier telecommunication service of facilities accessed through or connected to it. LGE will not be responsible for any charges that result from such unauthorized use.

B. Incidence of Harm

If a telephone company determines that the equipment provided to customer is faulty and possibly causing harm or interruption in service to the telephone network, it should disconnect telephone service until repair can be done. A telephone company may temporarily disconnect service as long as repair is not done.

C. Changes in Service

A local telephone company may make changes in its communications facilities or procedure. If these changes could reasonably be expected to affect the use of the KE800 or compatibility with the network, the telephone company is required to give advanced written notice to the user, allowing the user to take appropriate steps to maintain telephone service.

D. Maintenance Limitations

Maintenance limitations on the KE800 must be performed only at the LGE or its authorized agents. The user may not make any changes and/or repairs expect as specifically noted in this manual. Therefore, note that unauthorized alternations or repair may affect the regulatory status of the system and may void any remaining warranty.

E. Notice of Radiated Emissions

This model complies with rules regarding radiation and radio frequency emission as defined by local regulatory agencies. In accordance with these agencies, you may be required to provide information such as the following to the end user.

F. Pictures

The pictures in this manual are for illustrative purposes only; your actual hardware may look slightly different.

G. Interference and Attenuation

Phone may interfere with sensitive laboratory equipment, medical equipment, etc.Interference from unsuppressed engines or electric motors may cause problems.

H. Electrostatic Sensitive Devices

ATTENTION

Boards, which contain Electrostatic Sensitive Device (ESD), are indicated  by the sign. Following information is ESD handling:

- Service personnel should ground themselves by using a wrist strap when exchange system boards.
- When repairs are made to a system board, they should spread the floor with anti-static mat which is also grounded.
- Use a suitable, grounded soldering iron.
- Keep sensitive parts in these protective packages until these are used.
- When returning system boards or parts like EEPROM to the factory, use the protective package as described.

1.3 Abbreviations

For the purposes of this manual, following abbreviations apply:

APC	Automatic Power Control
BB	Baseband
BER	Bit Error Ratio
CC-CV	Constant Current °© Constant Voltage
DAC	Digital to Analog Converter
DCS	Digital Communication System
dBm	dB relative to 1 milli watt
DSP	Digital Signal Processing
EEPROM	Electrical Erasable Programmable Read-Only Memory
ESD	Electrostatic Discharge
FPCB	Flexible Printed Circuit Board
GMSK	Gaussian Minimum Shift Keying
GPIB	General Purpose Interface Bus
GSM	Global System for Mobile Communications
IPUI	International Portable User Identity
IF	Intermediate Frequency
LCD	Liquid Crystal Display
LDO	Low Drop Output
LED	Light Emitting Diode
OPLL	Offset Phase Locked Loop

1. INTRODUCTION

PAM	Power Amplifier Module
PCB	Printed Circuit Board
PGA	Programmable Gain Amplifier
PLL	Phase Locked Loop
PSTN	Public Switched Telephone Network
RF	Radio Frequency
RLR	Receiving Loudness Rating
RMS	Root Mean Square
RTC	Real Time Clock
SAW	Surface Acoustic Wave
SIM	Subscriber Identity Module
SLR	Sending Loudness Rating
SRAM	Static Random Access Memory
PSRAM	Pseudo SRAM
STMR	Side Tone Masking Rating
TA	Travel Adapter
TDD	Time Division Duplex
TDMA	Time Division Multiple Access
UART	Universal Asynchronous Receiver/Transmitter
VCO	Voltage Controlled Oscillator
VCTCXO	Voltage Control Temperature Compensated Crystal Oscillator
WAP	Wireless Application Protocol

2. PERFORMANCE

2.1 Hardware Features

		Specification	Etc.
Form factor		Slide	
General	Network	GSM EDGE Tri-band(900/1800/1900)	Internal
	Target Market	Europe Open	
	Target Operator	None	
	Availability	November 2006	1st Launch
Size	Dimension (mm)	95 * 46 * 16.4	
	Weight (g)	93	
Display	Single Display	Pixel 240*320 Color 262K TFT	
		Size 2.0 inch	
		Touch Sensor Captive Cypress	
Life Time	Standby Time	200 hr	(PL : 7)
	Standby Time	200 hr	(PG: 9)
Number of Keys		12 (0~9,*,#),5 Sidekey (Vol Up/Dwon/ CAM /MP3/END)	
Key Define	Numeric	O International Access : HI(+)(long *) Manner Mode : Profile icon long press	
	Navigation	X Touch Sensor	
	OK	X Touch Sensor	
	Send	X Touch Sensor	
	End	O Side Key	
	Soft Keys	X Touch Sensor	
	Func Keys	X Touch Sensor	
	Cancel	X Touch Sensor	
	Side Keys	5 END, Volume(Up/Down) ,MP3, CAM	
Basic Feature	Baseband	Infineon S-Gold2 Multimedia No	
	Speech codec	FR/HR/EFR/AMR	
	Memory	1Gb NOR Flash/ 256Mb SRAM	
		External MicroSD	
	Camera	2M CMOS AF	
	Flash	White LED (1)	
	Speaker	16 Pi , 3.0t	
	Receiver	O	
	MIC	O	
	Ear Jack	18 Pin, (USB data communication & Charging)	
	Indicator	X	
	IO Port	Share with Ear Jack Port	
	USB Port	Share with Ear Jack Port	
	IrDA	X	
	Bluetooth	O (Ver 2.0) - Handsfree/BPP/A2DP/AVRCP etc	
	SIM	Plug-In Type : 3VOnly	
	Battery	3.7V > 800 mAh LI-Ion (Inner-Pack)	
	MIDI	MA3 (Infineon support)	

2.2 Technical Specification

<table>
<tr><th>Item</th><th>Description</th><th>Specification</th></tr>
<tr><td>1</td><td>Frequency Band</td><td>GSM900 1) PGSM
• TX: 890 + 0.2 x n MHz
• RX: 935 + 0.2 x n MHz (n = 1 ~ 124)
2) EGSM
• TX: 890 + 0.2 x (n-1024) MHz
• RX: 935 + 0.2 x (n-1024) MHz (n = 975 ~ 1023)
DCS1800
• TX: 1710.2 + 0.2 x (n-512) MHz
• RX: 1805.2 + 0.2 x (n-512) MHz (n = 512 ~ 885)
PCS1900
• TX: 1850 + (n-511) x 0.2 MHz
• RX: 1930 + (n-511) x 0.2 MHz (n = 512 ~ 810)</td></tr>
<tr><td>2</td><td>Phase Error</td><td>RMS < 5 degrees
Peak < 20 degrees</td></tr>
<tr><td>3</td><td>Frequency Error</td><td>< 0.1ppm</td></tr>
<tr><td>4</td><td>Power Level</td><td>GSM900
<table>
<tr><td>Level</td><td>Power</td><td>Toler.</td><td>Level</td><td>Power</td><td>Toler.</td></tr>
<tr><td>5</td><td>33 dBm</td><td>±2dB</td><td>13</td><td>17 dBm</td><td>±3dB</td></tr>
<tr><td>6</td><td>31 dBm</td><td>±3dB</td><td>14</td><td>15 dBm</td><td>±3dB</td></tr>
<tr><td>7</td><td>29 dBm</td><td>±3dB</td><td>15</td><td>13 dBm</td><td>±3dB</td></tr>
<tr><td>8</td><td>27 dBm</td><td>±3dB</td><td>16</td><td>11 dBm</td><td>±5dB</td></tr>
<tr><td>9</td><td>25 dBm</td><td>±3dB</td><td>17</td><td>9 dBm</td><td>±5dB</td></tr>
<tr><td>10</td><td>23 dBm</td><td>±3dB</td><td>18</td><td>7 dBm</td><td>±5dB</td></tr>
<tr><td>11</td><td>21 dBm</td><td>±3dB</td><td>19</td><td>5 dBm</td><td>±5dB</td></tr>
<tr><td>12</td><td>19 dBm</td><td>±3dB</td><td></td><td></td><td></td></tr>
</table>
DCS / PCS
<table>
<tr><td>Level</td><td>Power</td><td>Toler.</td><td>Level</td><td>Power</td><td>Toler.</td></tr>
<tr><td>0</td><td>30 dBm</td><td>±2dB</td><td>8</td><td>14 dBm</td><td>±3dB</td></tr>
<tr><td>1</td><td>28 dBm</td><td>±3dB</td><td>9</td><td>12 dBm</td><td>±4dB</td></tr>
<tr><td>2</td><td>26 dBm</td><td>±3dB</td><td>10</td><td>10 dBm</td><td>±4dB</td></tr>
<tr><td>3</td><td>24 dBm</td><td>±3dB</td><td>11</td><td>8 dBm</td><td>±4dB</td></tr>
<tr><td>4</td><td>22 dBm</td><td>±3dB</td><td>12</td><td>6 dBm</td><td>±4dB</td></tr>
<tr><td>5</td><td>20 dBm</td><td>±3dB</td><td>13</td><td>4 dBm</td><td>±4dB</td></tr>
<tr><td>6</td><td>18 dBm</td><td>±3dB</td><td>14</td><td>2 dBm</td><td>±5dB</td></tr>
<tr><td>7</td><td>16 dBm</td><td>±3dB</td><td>15</td><td>0 dBm</td><td>±5dB</td></tr>
</table></td></tr>
<tr><td>5</td><td>EDGE
Max. Power</td><td>27dBm±2dB @GSM900
26dBm±2dB @DCS/PCS</td></tr>
<tr><td>6</td><td>EDGE
Modulation
Accuracy</td><td>RMS EVM : < 9 %
Peak EVM : < 30 %
95:th percentile : < 15 %
Origin Offset Suppression(Carrier Suppression) : > 30dB</td></tr>
</table>

Item	Description	Specification	
7	Output RF Spectrum (Due to Modulation)	**GSM900**	
		Offset from Carrier (kHz).	Max. [dBc]
		100	+0.5
		200	-30
		250	-33
		400	-60
		600~ <1,200	-60
		1,200~ <1,800	-60
		1,800~ <3,000	-63
		3,000~ <6,000	-65
		6,000	-71
		DCS / PCS	
		Offset from Carrier (kHz).	Max. [dBc]
		100	+0.5
		200	-30
		250	-33
		400	-60
		600~ <1,200	-60
		1,200~ <1,800	-60
		1,800~ <3,000	-65
		3,000~ <6,000	-65
		6,000	-73
8	Output RF Spectrum (Due to Switching)	**GSM900**	
		Offset from Carrier (kHz)	Max. [dBm]
		400	-19
		600	-21
		1,200	-21
		1,800	-24

2. PERFORMANCE

Item	Description	Specification	
8	Output RF Spectrum (Due to Switching)	**DCS / PCS**	
		Offset from Carrier (kHz).	Max. [dBm]
		400	-22
		600	-24
		1,200	-24
		1,800	-27
9	Spurious Emissions	Conduction, Emission Status	
		Radiation, Emission Status	

3. TECHNICAL BRIEF

3.1 Quad-Band RF EDGE Transceiver (PMB6272, U602)

The PMB 6272 SMARTiPM is an integrated single chip, quad-band transceiver for GSM850/GSM900 /GSM1800/GSM1900 designed for voice and data transfer applications. The transceiver provides an analog I/Q baseband interface and consists of a direct conversion receiver and a quad-band polar modulator transmitter for GSM and EDGE with integrated PGA functionality. Further on a completely integrated SD-synthesizer with HSCSD and GPRS/EDGE capability, a digitally controlled reference oscillator with three outputs, a fully integrated quad-band RF oscillator and a three wire bus interface with all necessary control circuits complete the transceiver.

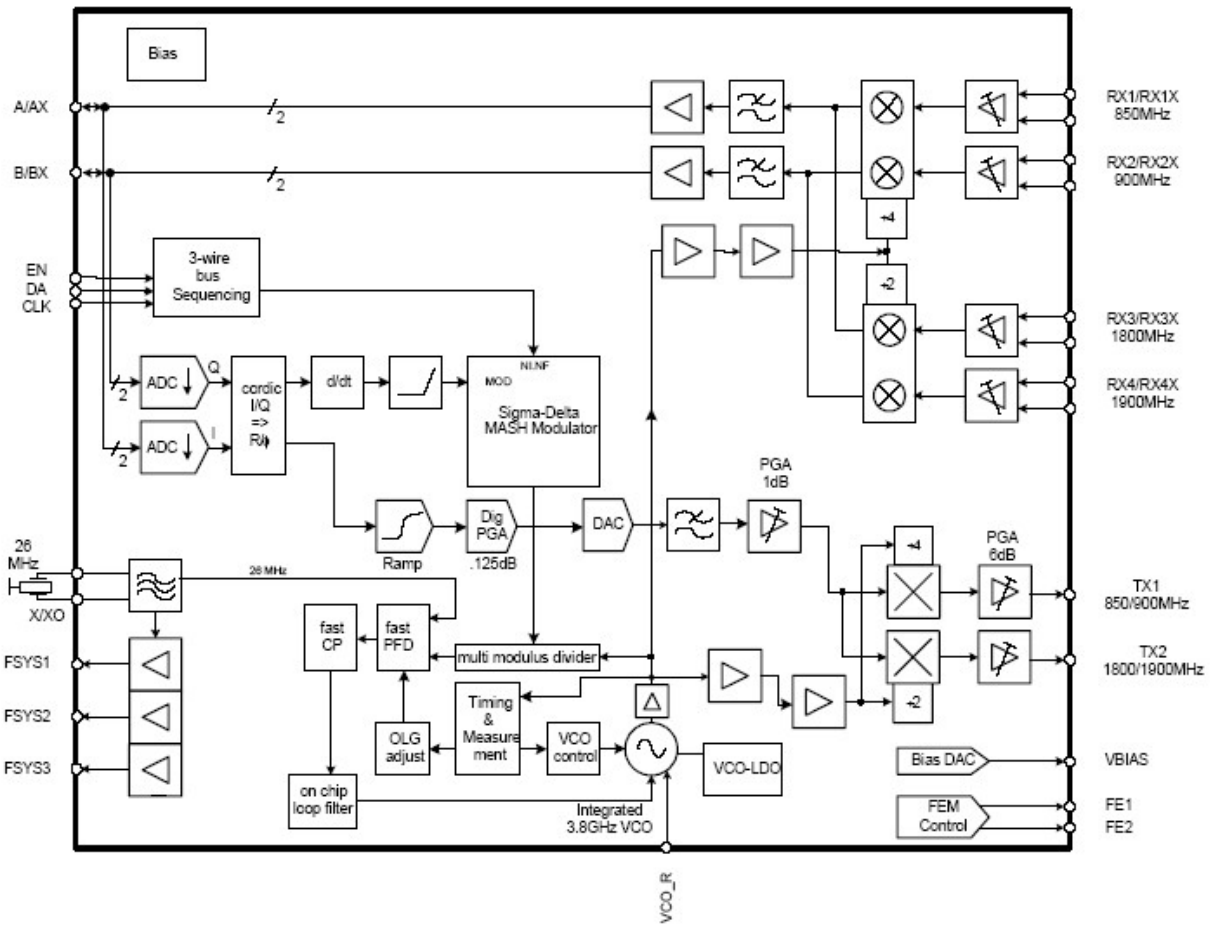


Figure. 3-1 FUNCTIONAL BLOCK DIAGRAM

3. TECHNICAL BRIEF

(1) Receiver

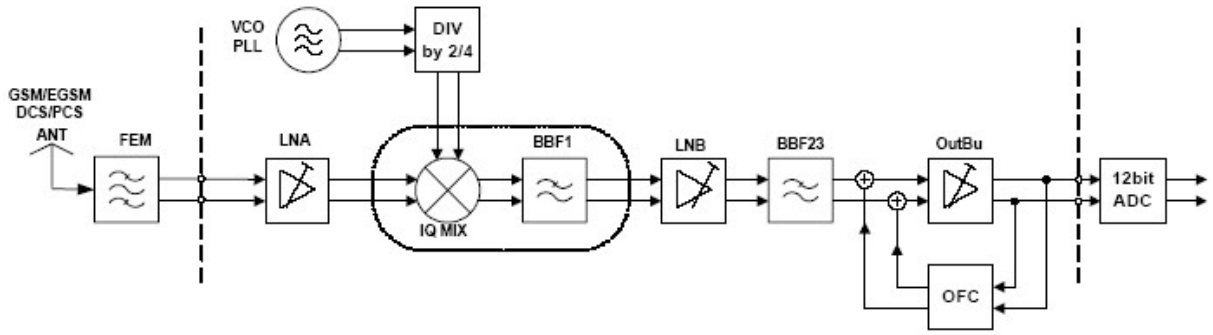


Figure. 3-2 Receiver path Overview

The constant gain direct conversion receiver contains all active circuits for a complete receiver chain for GSM/GPRS/EDGE (see Figure3-2). The GSM850/900/DCS1800/ PCS1900 LNAs with balanced inputs are fully integrated. No interstage filtering is needed. The orthogonal LO signals are generated by a divider-by-four for GSM850/900 band and a divider-by-two for the DCS1800/PCS1900 band.Down conversion to baseband domain is performed by low/high band quadrature direct down conversion mixers. The baseband chain contains a LNB (low noise buffer), channel filter, output buffer and DCoffset compensation. The 3rd order lowpass filter is fully integrated and provides sufficient suppression of blocking signals as well as adjacent channel interferers and avoids anti-aliasing through the baseband ADC. The receive path is fully differential to suppress on-chip interferences. Several gain steps are implemented to cope with the dynamic range of the input signals. Depending on the baseband ADC dynamic range, single- or multiple gain step switching schemes are applicable. Furthermore an automatic DC-offset compensation can be used (depending on the gain setting) to reduce the DC-offset at baseband-output. A programmable gain correction can be applied to correct for front end- and receiver gain tolerances.

(2) Transmitter

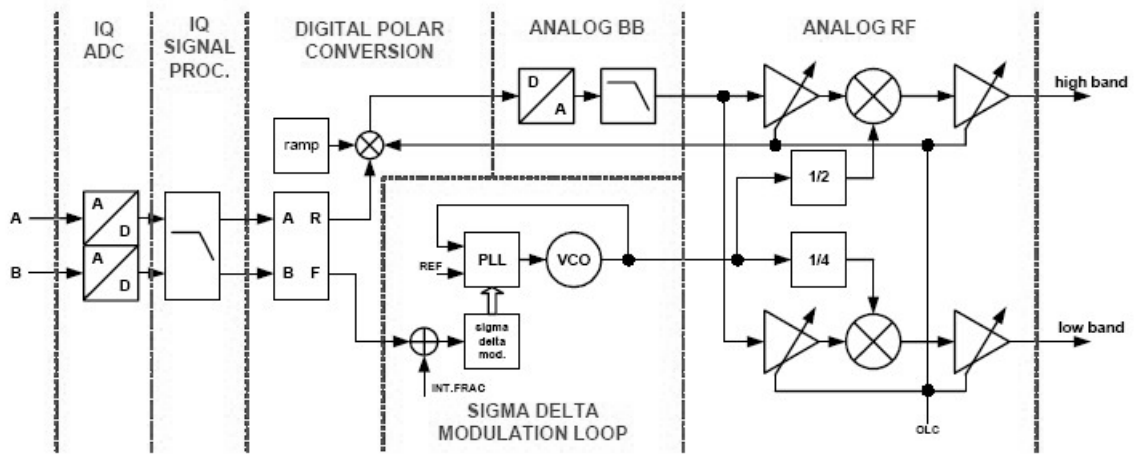


Figure. 3-3 Transmitter architecture Overview

The GMSK transmitter supports power class 4 for GSM850 and GSM900 as well as power class 1 for DCS1800 and PCS1900. The digital transmitter architecture is based on a very low power fractional-N Sigma-Delta synthesizer without any external components (see Figure 3-3). The analog I/Q modulation data from the baseband is converted to digital, filtered and transformed to polar coordinates. The phase/frequency signal is further on processed by the Sigma-Delta modulation loop. The output of its associated VCO is divided by four or two, respectively, and connected via an output buffer to the appropriate single ended output pin. This configuration ensures minimum noise level.
The 8PSK transmitter supports power class E2 for GSM850 and GSM900 as well as for DCS1800 and PCS1900. The digital transmitter architecture is based on a polar modulation architecture, where the analog modulation data (rectangular I/Q coordinates) is converted to digital data stream and is subsequently transformed to polar coordinates by means of a CORDIC algorithm. The resulting amplitude information is fed into a digital multiplier for power ramping and level control. The ready processed amplitude signal is applied to a DAC followed by a low pass filter which reconstructs the analog amplitude information. The phase signal from the CORDIC is applied to the Sigma-Delta fractional-N modulation loop. The divided output of its associated VCO is fed to a highly linear amplitude modulator, recombining amplitude and phase information. The output of the amplitude modulator is connected to a single ended output RF PGA for digitally setting the wanted transmit power.
The PA interface of SMARTiPM supports direct control of standard dual mode power amplifiers (PA's) which usually have a power control input VAPC and an optional bias control pin VBIAS for efficiency enhancement. In GMSK mode, the PA is in saturated high efficiency mode and is controlled via its VAPC pin directly by the baseband ramping DAC. In this way both up- / down-ramping and output power level are set. In 8PSK mode, the ramping functionality is assured by an on-chip ramping generator, whereas output power is controlled by the PGA's as described above.

(3) RF-Synthesizer

The SMARTiPM contains a fractional-N sigma-delta synthesizer for the frequency synthesis in the RX operation mode. For TX operation mode the fractional-N sigma-delta synthesizer is used as Sigma-Delta modulation loop to process the phase/frequency signal. The 26MHz reference signal is provided by the internal crystal oscillator. This frequency serves as comparison frequency of the phase detector and as clock frequency for all digital circuitry.The divider in the feedback path of the synthesizer is carried out as a multi-modulus divider (MMD). The loop filter is fully integrated and the loop bandwidth is about 100 kHz to allow the transfer of the phase modulation. The loop bandwidth is automatically adjusted prior to each slot (OLGA^2). To overcome the statistical spread of the loopfilter element values an automatic loopfilter adjustment (ALFA) is performed before each synthesizer startup.The fully integrated quad-band VCO is designed for the four GSM bands (850, 900, 1800, 1900 MHz) and operates at double or four times transmit or receive frequency. To cover the wide frequency range the VCO is automatically aligned by a binary automatic band selection (BABS) before each synthesizer startup.

(4) DCXO

The SMARTiPM contains a fully integrated 26MHz digitally controlled crystal oscillator (DCXO) with three outputs for the system clock, one output for the GSM baseband and two additional for other subsystems (GPS, Bluetooth, etc.). The only external part of the oscillator is the crystal itself.The frequency tuning is performed along the selected subrange by programming the frequency control word (XO_TUNE) via the three wire bus ("3Wbus").

(5) Front End module control

Implemented in the SMARTiPM are two outputs for direct control of front end modules with two logic input pins to select RX- and TX-mode as well as low- and highband operation.

3.2 Power Amplifier Module (PAM : SKY77340, U502)

The SKY77340 Power Amplifier Module (PAM) is designed in a compact form factor for quad-band cellular handsets comprising GSM850/900, DCS1800, PCS1900, supporting GMSK and linear EDGE modulation. Class 12 General Packet Radio Service (GPRS) multi-slot operation is also supported. (Class 10 is used in KE800)

The module consists of a GSM850/900 PA block and a DCS1800/PCS1900 PA block, impedance matching circuitry for 50Ω input and output impedances, and a Multi-function Power Amplifier Control (MFC) block. A custom CMOS integrated circuit provides the internal MFC function and interface circuitry. RF input and output ports are internally matched to 50Ω to reduce the number of external components. Extremely low leakage current (2.5uA, typical) maximizes handset standby time. Band select (BS) circuitry selects GSM transmit frequency band (logic 0) and DCS/PCS transmit frequency band (logic 1). MODE circuitry selects GMSK modulation (logic 0) or EDGE modulation (logic 1). VRAMP controls the out power for GMSK modulation and provides bias optimization for EDGE modulation depending on the state of MODE control. The integrated multi-function control (MFC) provides envelope amplitude control in GMSK mode, reducing sensitivity to input drive, temperature, power supply, and process variation. In EDGE mode, the MFC configures the PA for fixed gain, and provides the ability to optimize the PA bias operation at different power levels. This circuitry regulates PA bias conditions, reducing sensitivity to temperature, minimize battery drain.

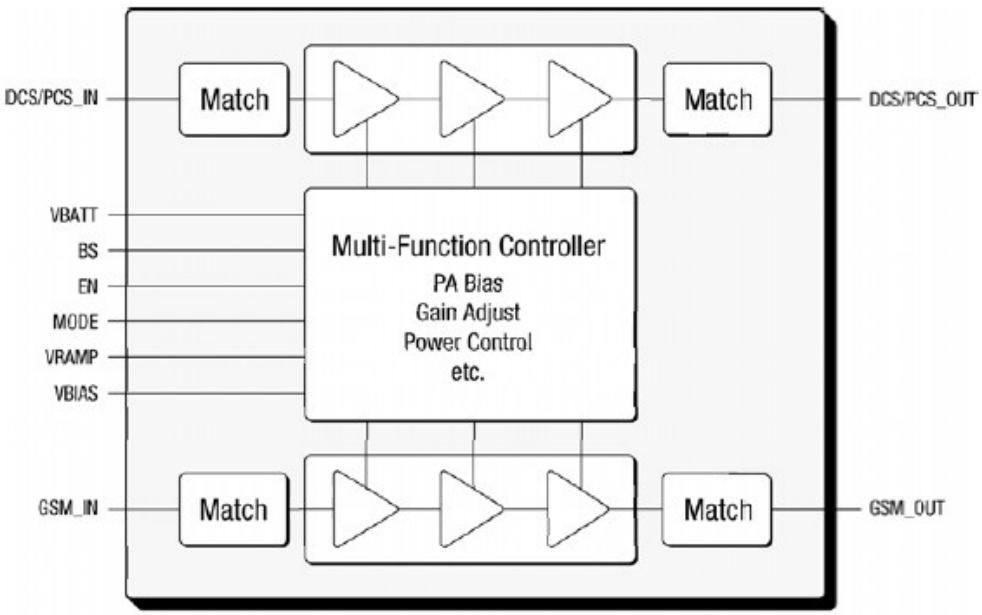
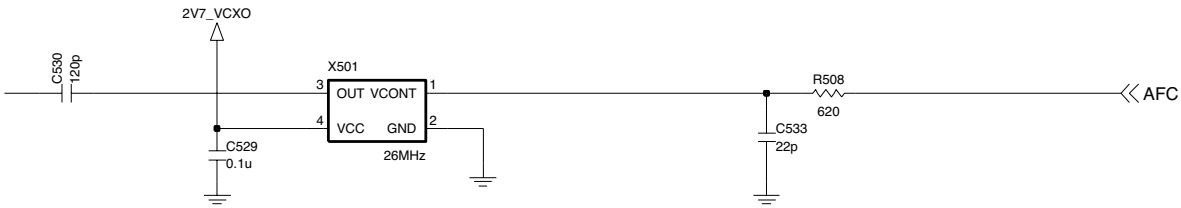


Figure. 3-4 SKY77340 Functional Block Diagram

3.3 26 MHz Clock (VCTCXO, X601)



The 26 MHz clock(X601) consists of a TCXO(Temperature Compensated Crystal Oscillator) which oscillates at a frequency of 26 MHz. It is used within the PMB6272, base band chipset (U101, PMB8876)

Figure 3-5 VCTCXO CIRCUIT DIAGRAM

3.4 Front End Module for Triband(YGHF-S006T, FL601)

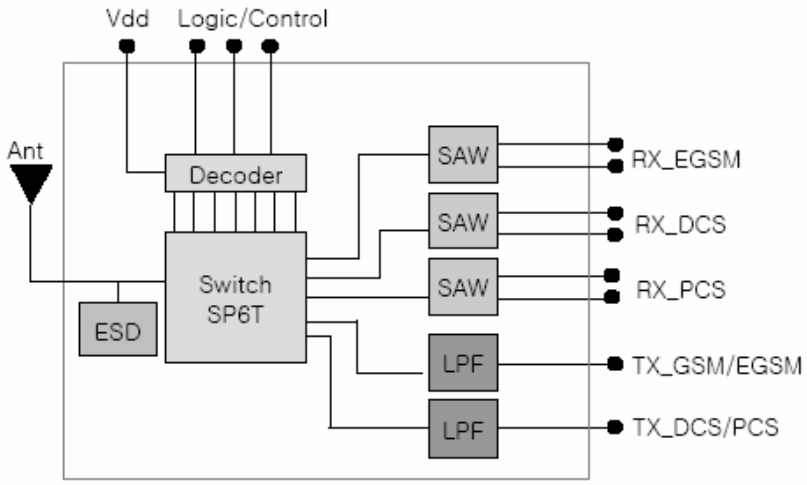


Figure 3-6 FEM Functional Block Diagram

3. TECHNICAL BRIEF

Item	Unit	Condition	EGSM Band		
			Min.	Tpy.	Max.
Tx mode	MHz	Passband Frequency Range	880		915
	MHz	Bandwidth		35	
	dB	Insertion Loss		1.3	1.5
	dB	Attenuation at 2fo(Tx)	30	35	
		3fo(Tx)	30	35	
		VSWR at ANT Port		1.3	1.5
		VSWR at Tx Port		1.3	1.5
	dB	Isolation			
		Tx(EGSM) -> Rx(EGSM)	35	45	
		Rx(EGSM) -> ANT	30	40	
RX mode	MHz	Passband Frequency Range	925		960
	MHz	Bandwidth		35	
	dB	Insertion Loss		3.0	3.3
	dB	Attenuation 0 - 915 MHz	25	30	
		980 - 1030 MHz	25	30	
		1030 - 6000 MHz	20	25	
		VSWR at ANT port		1.8	2.0
		VSWR at Rx port		1.9	2.2
	dB	Isolation			
		Tx(EGSM) -> ANT	30	35	
	dB	Amplitude Balance			1.0
	Deg	Phase Balance	-10		10
	0hm	Output Balance Impedance	150ohm//56nH		
Common	mA	Current Consumption			1.0
	V	Control Voltage	2.5		3.0

<GSM>

Item	Unit	Condition	DCS Band		
			Min.	Tpy.	Max.
Tx mode	MHz	Passband Frequency Range	1710		1785
	MHz	Bandwidth		75	
	dB	Insertion Loss		1.4	1.6
	dB	Attenuation at 2fo(Tx)	28	33	
		3fo(Tx)	30	35	
		VSWR at ANT Port		1.4	1.6
		VSWR at Tx Port		1.4	1.6
	dB	Isolation			
		Tx(DCS) -> Rx(DCS)	30	35	
		Rx(DCS) -> ANT	30	35	
RX mode	MHz	Passband Frequency Range	1805		1880
	MHz	Bandwidth		75	
	dB	Insertion Loss		3.3	3.6
	dB	Attenuation 0 - 1705 MHz	25	30	
		1705 - 1785 MHz	12	18	
		1920 - 1980 MHz	15	20	
		1980 - 6000 MHz	20	25	
		VSWR at ANT Port		2.0	2.3
		VSWR at Rx Port		2.2	2.5
	dB	Isolation			
		Tx(DCS) -> ANT	30	35	
	dB	Amplitude Balance			2.0
	Deg	Phase Balance	-15		15
	0hm	Output Balance Impedance	150ohm//15nH		
Common	mA	Current Consumption			1.0
	V	Control Voltage	2.5		3.0

<DCS>

Item	Unit	Condition	DCS Band		
			Min.	Tpy.	Max.
Tx mode	MHz	Passband Frequency Range	1850		1910
	MHz	Bandwidth		60	
	dB	Insertion Loss		1.6	1.8
	dB	Attenuation at 2fo(Tx)	28	33	
		3fo(Tx)	28	33	
		VSWR at ANT Port		1.6	1.8
		VSWR at Tx Port		1.6	1.8
	dB	Isolation			
		Tx(PCS) -> Rx(PCS)	30	35	
		Rx(PCS) -> ANT	30	35	
RX mode	MHz	Passband Frequency Range	1930		1990
	MHz	Bandwidth		60	
	dB	Insertion Loss		3.3	3.6
	dB	Attenuation 0 - 1830 MHz	30	35	
		1830 - 1910 MHz	10	18	
		2010 - 2070 MHz	10	18	
		2070 - 6000 MHz	25	30	
		VSWR at ANT Port		2.0	2.3
		VSWR at Rx Port		2.2	2.5
	dB	Isolation			
		Tx(PCS) -> ANT	25	30	
	dB	Amplitude Balance			2.0
	Deg	Phase Balance	-15		15
	0hm	Output Balance Impedance	150ohm//15nH		
Common	mA	Current Consumption			1.0
	V	Control Voltage	2.5		3.0

<PCS>

3.5 Baseband Chip(PMB8876, U101)

(1) Introduction

PMB8876 is a GSM/EDGE single chip mixed signal baseband IC containing all analog and digital functionality of a cellular radio. Additionally PMB8876 provides multimedia. It is operated as a single chip solution, integrating the digital and mixed signal portions of the base band.

Processing cores

- ARM926EJ-S 32 bit processor core for controller functions. The ARM926EJ-S includes an MMU, and the Jazelle Java extension for Java acceleration.
- TEAKLite® DSP core.

ARM-Memory

- 32 kByte Boot ROM on the AHB.
- 96 kByte SRAM on the AHB, flexibly usable as program or data RAM
- 16 kByte cache for program (internal)
- 8 kByte tightly coupled memory for program (internal)
- 8 kByte cache for data (internal)
- 8 kByte tightly coupled memory for data (internal)

TEAKLigh ® t-Memory

- 104k X 16bit Program ROM
- 8k X 16bit Program RAM
- 60k X 16bit Data ROM
- 37k X 16bit Data RAM
- Incremental Redundancy (IR)Memory of 35904 words of 16 bit

Shared Memory Block

- 1.5k X 32bit Shared RAM (dual ported) between controller system and TEAKLite ®

Controller Bus System

The processing cores and their peripherals are connected by powerful buses:

- multi-layer AHB for connecting the ARM and the other master capable building blocks with the internal and external memories and with the peripheral buses.
- 1FPI-Bus for connecting the controller peripherals which require DMA support, called hereafer FPI1 respectively.
- An FPI-Bus for connecting GSM peripherals, called hereafter FPI3 bus.
- A controller FPI Bus for connecting the low performance controller peripherals such as keypad etc.,called hereafter FP12 bus.
- FPI1, FPI2 and FPI3 are connected asynchronously to the AHB buses. 1DMA controller with 8 channels releases the controller from data transfers.
- 1 AHB Lite-bus for connecting multimedia and high performance peripherals, called AHB_PER hereafter. This peripheral bus is connected to the multilayer AHB'Backbone' by an asynchronous, bust capable AHB2AHB bridge which is shared between accessing masters.
- The DMA controller is enabled to access AHB_PER by the use of its second master interface.

3.6 Audio

KE800 Audio signal flow diagram as following diagram

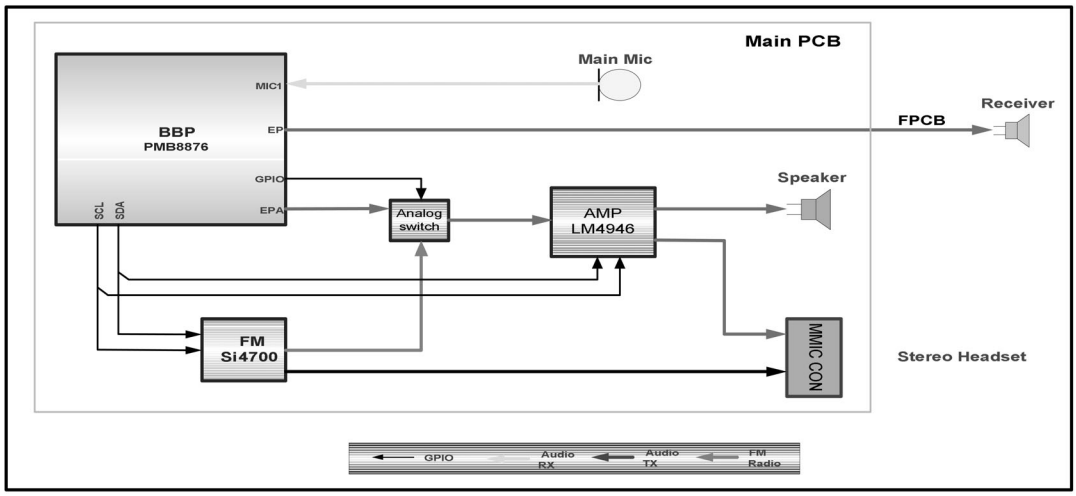


Figure 3-8 Audio signal flow diagram

3.6.1. Audio amplifier sub system IC with 3D effect

Audio amplifier sub system IC is an audio power amplifier capable of delivering 540mW of continuous average power into a mono 8Ω bridged-tied load(BTL) with 1% THD+N, 35mW per channel of continuous average power into stereo 32Ω single-ended (SE) loads with 1% THD+N from a 3.3V Power supply. The LM4946 features a 32-step digital volume control and eight distinct output modes. The digital volume control, 3D enhancement, and output modes (mono/SE/OCL) are programmed through a two-wire I2C interface that allows flexibility in routing and mixing audio channels.

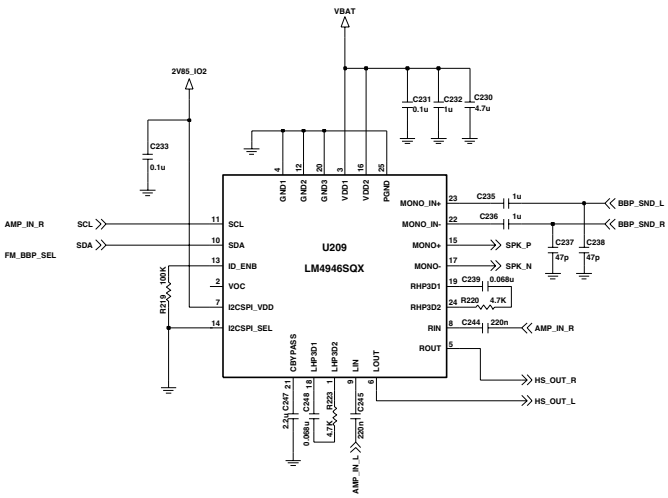


Figure 3-9 Audio amplifier Sub-system IC

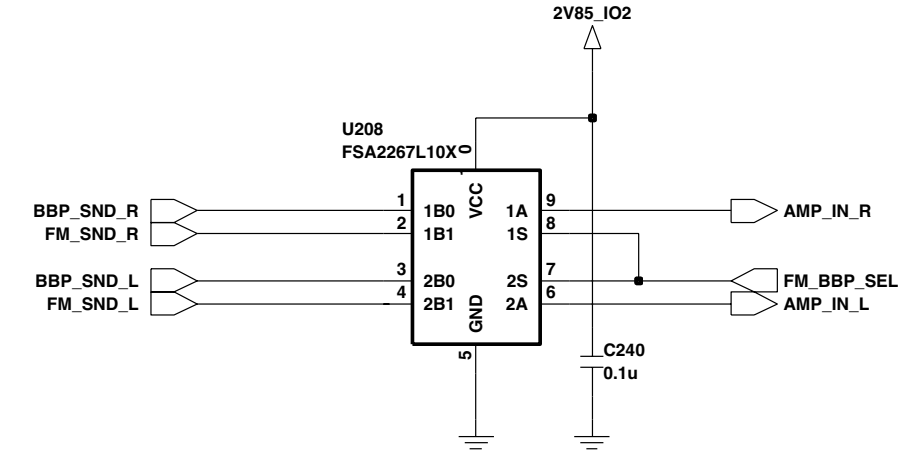


Figure 3-10 Audio signal distribute analog switch

3.6.2. Microphone

The microphone is a omni-directional microphone condenser microphone with -42 ± 3dB sensitivity.

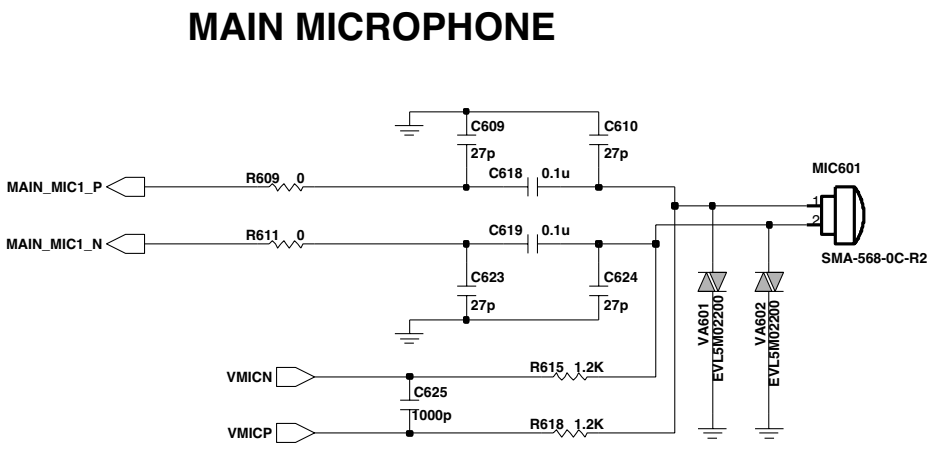


Figure 3-11 Microphone with Gain switching circuit

4. Trouble Shooting

4.1 Main & Sub PCB Components Placement

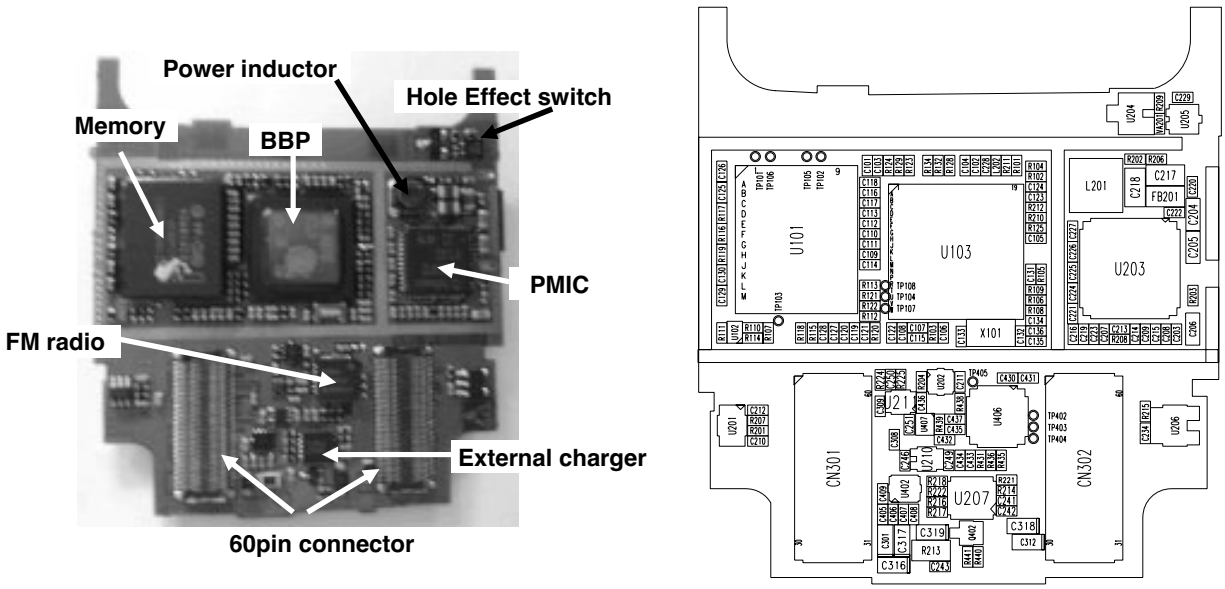


Figure 4-1. Main PCB Bottom

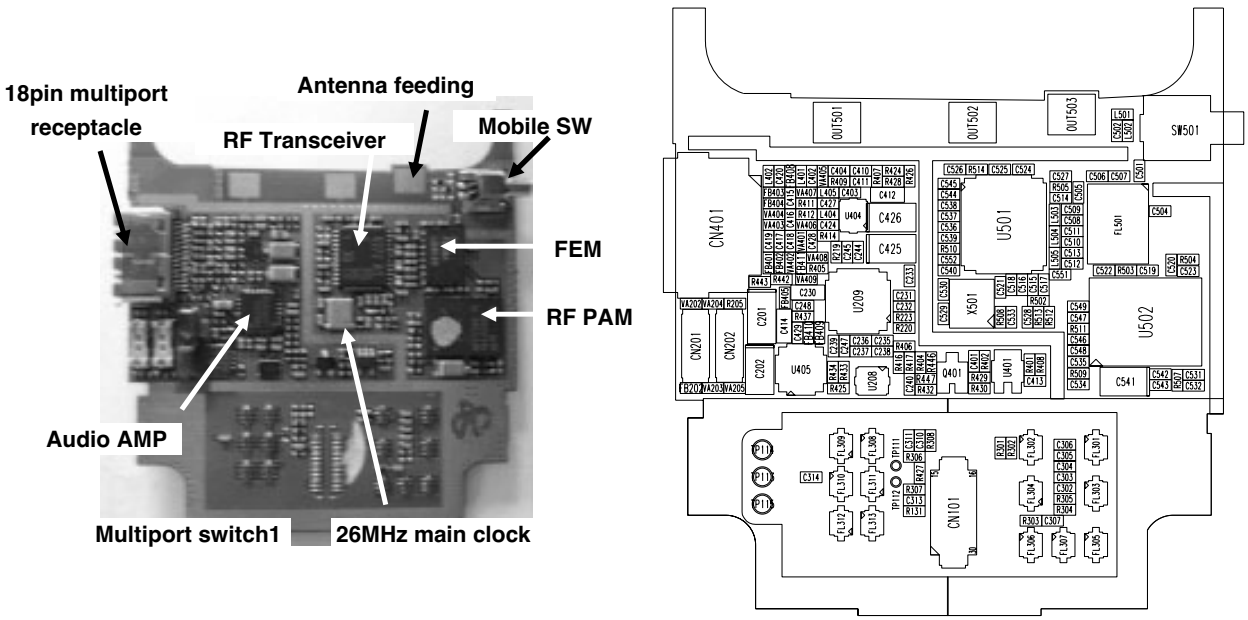


Figure 4-2. Main PCB top

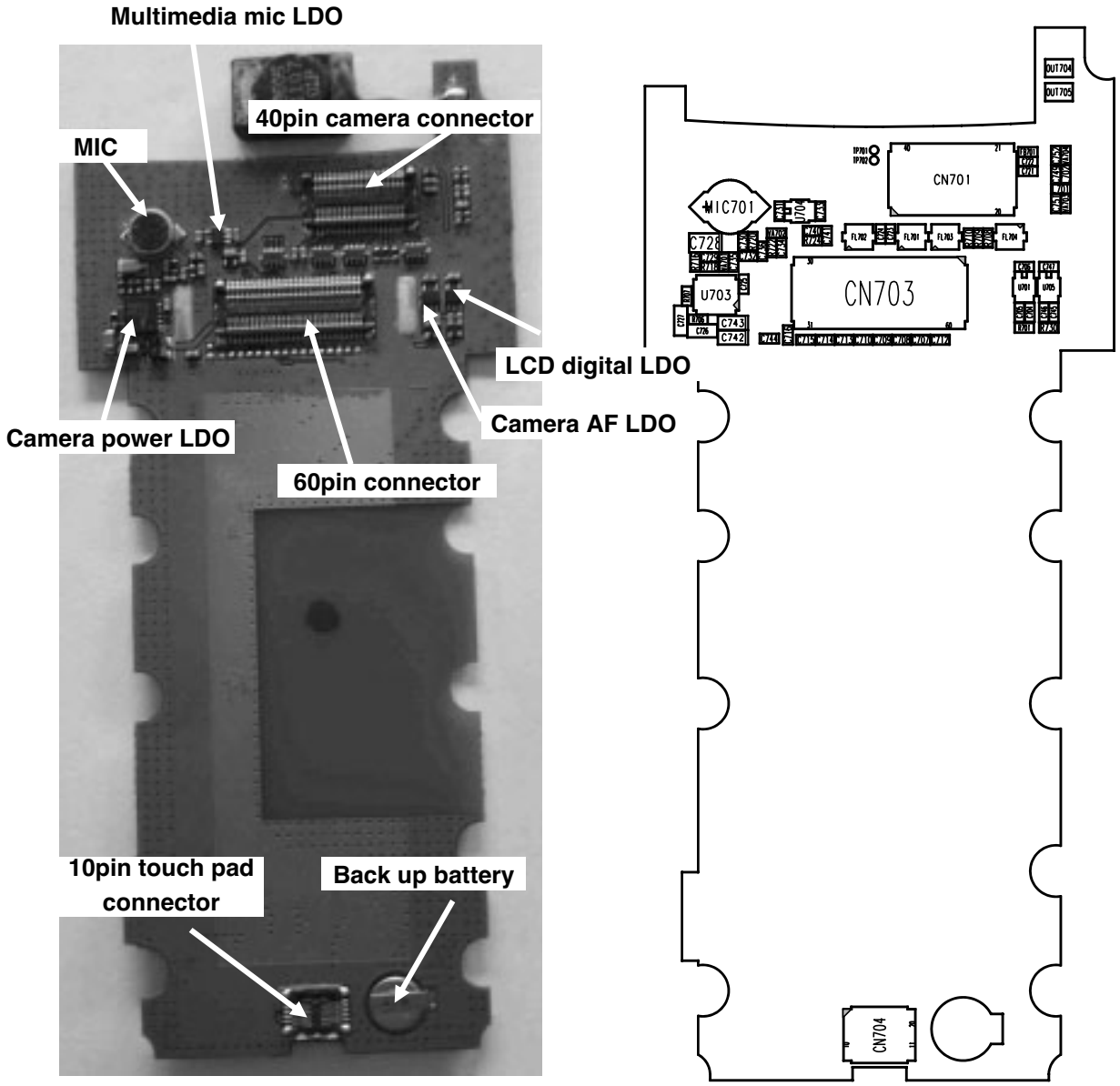


Figure 4-3. Sub PCB Bottom

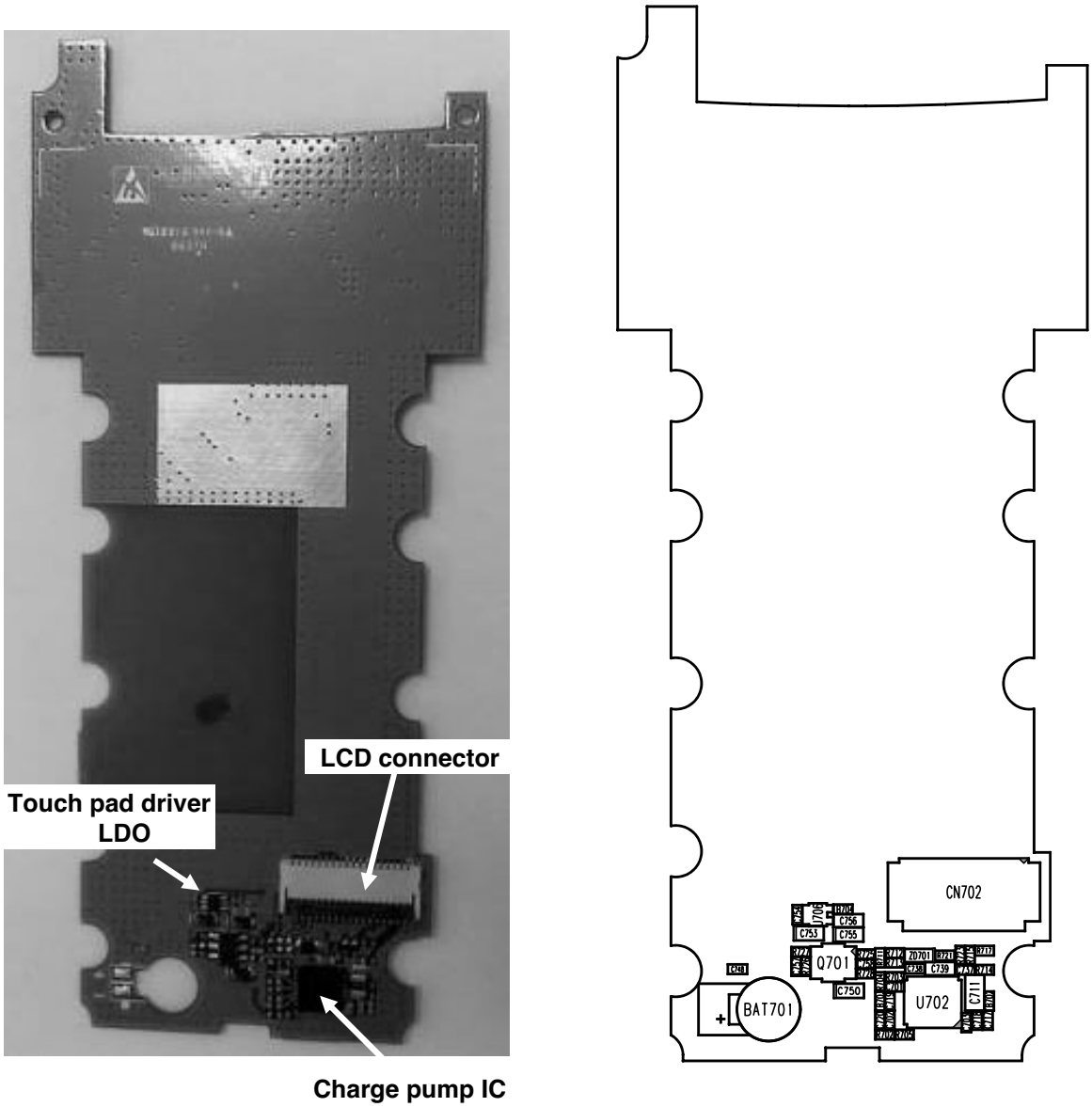
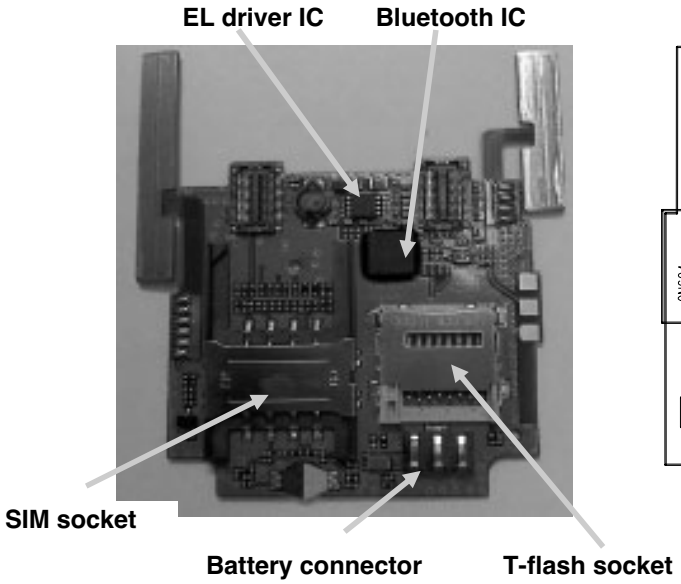
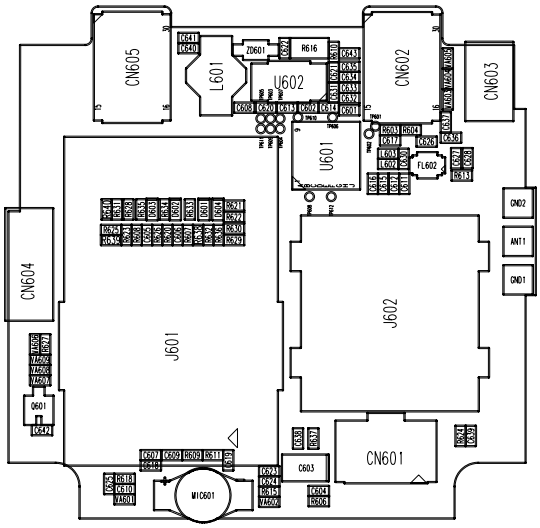
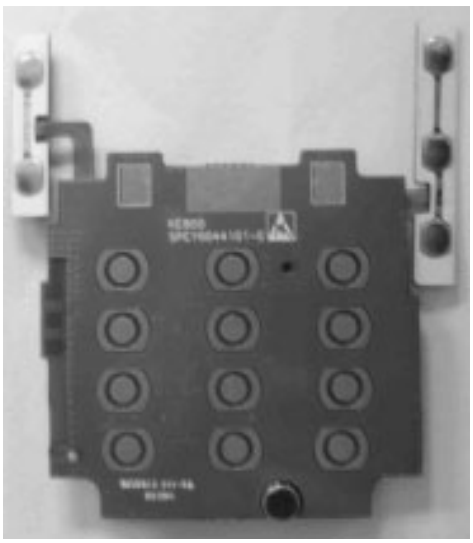


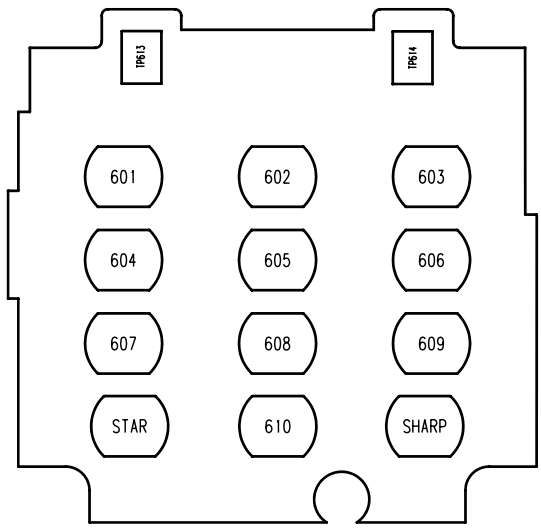
Figure 4-4.Sub PCB Top

4.2 Key PCB Components Placement

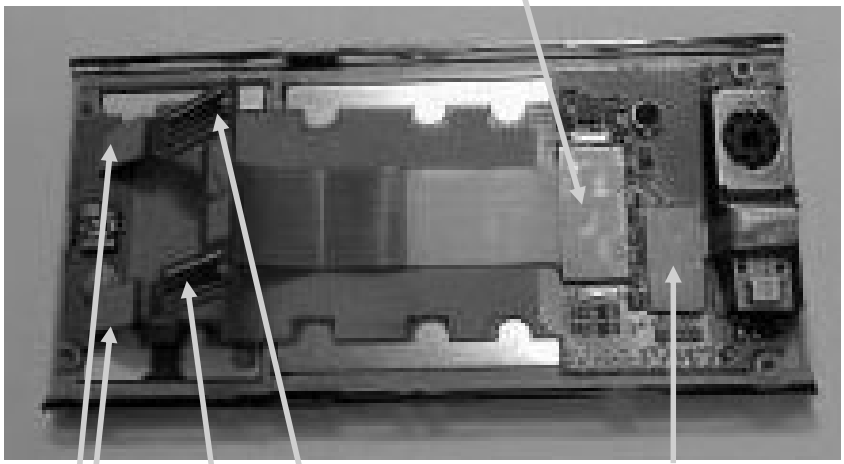


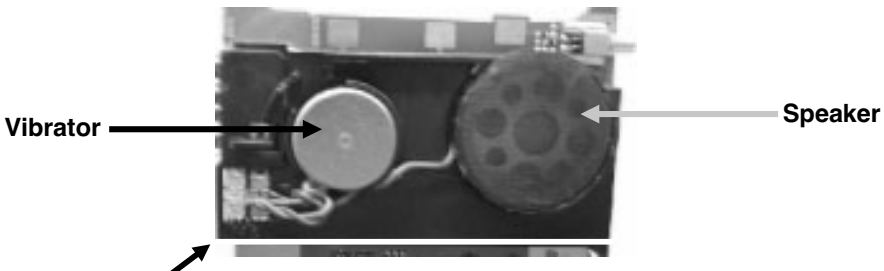






4.3 FPCB Components Placement



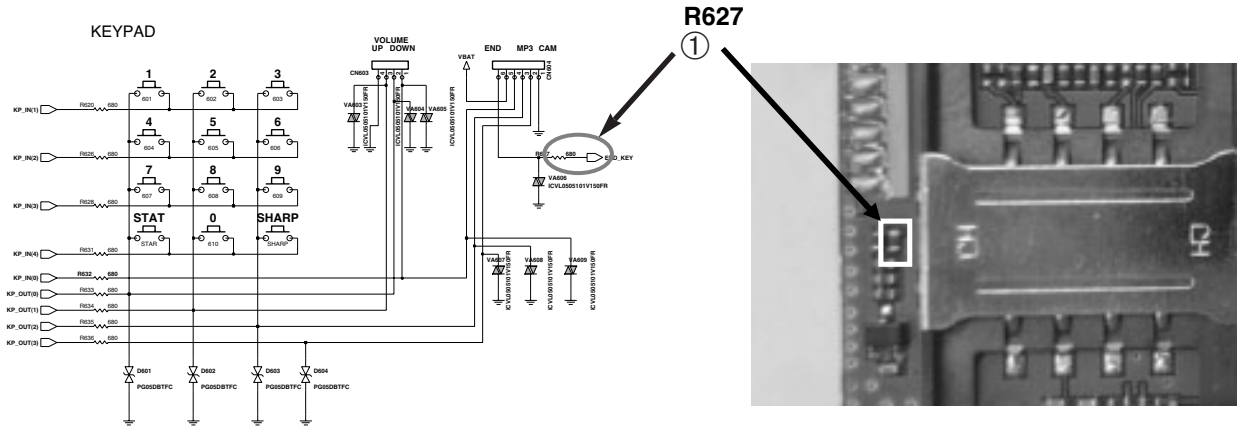


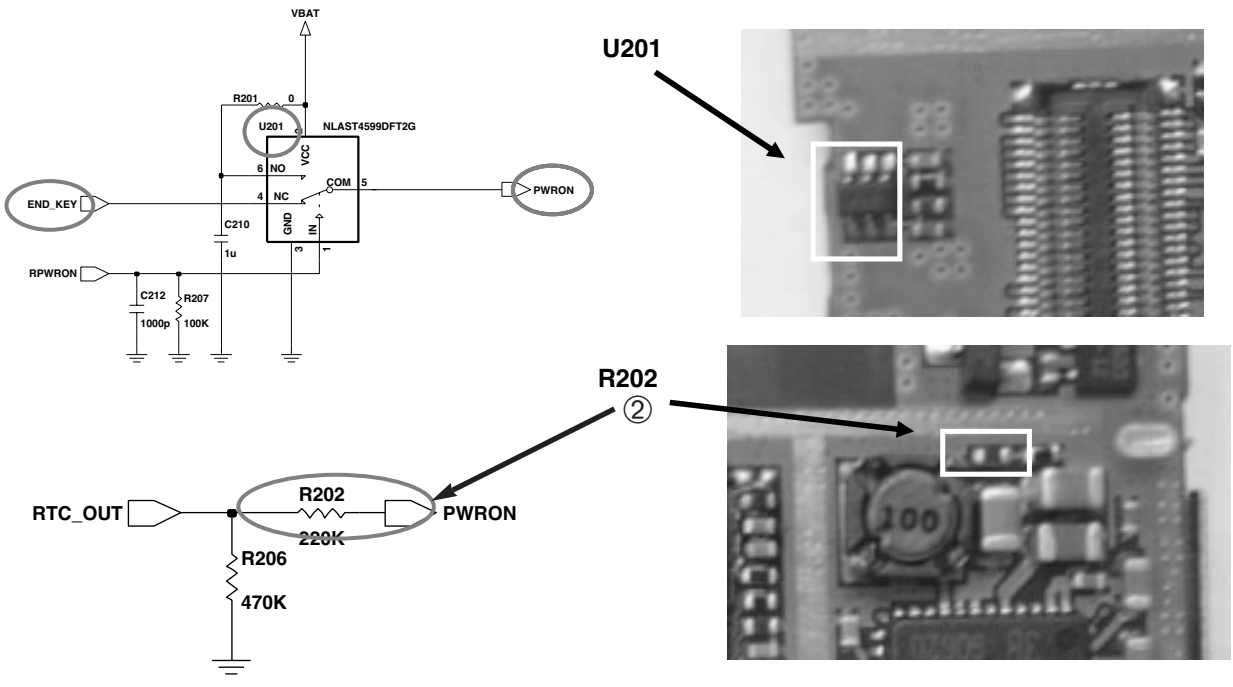
4.4 Power On Trouble

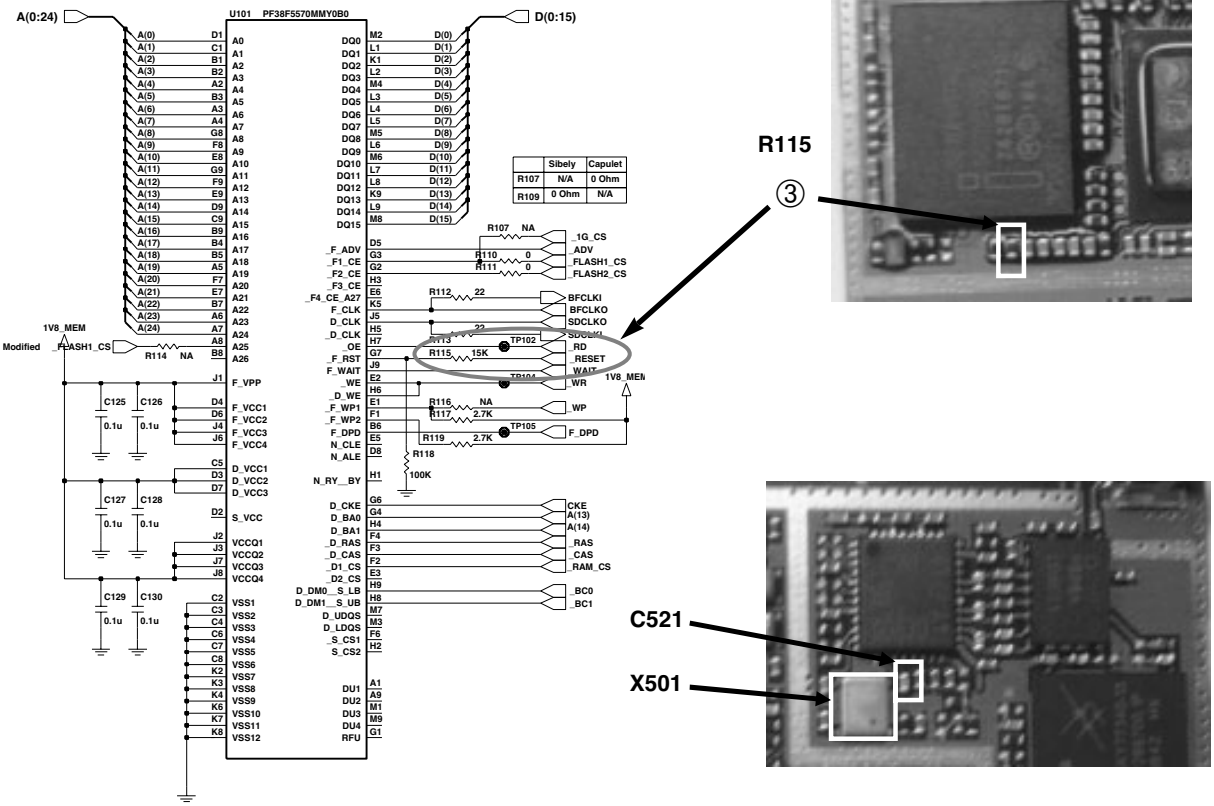
4.4.1 Power On Sequence

Check Points

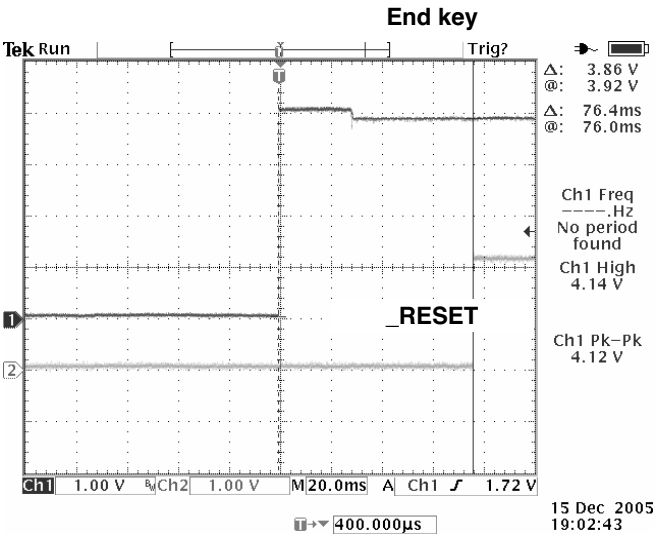
- Battery Voltage(Need to over 3.35V)
- Power-On Key Detection (PWRON signal)
- Outputs of LDOs from PMIC



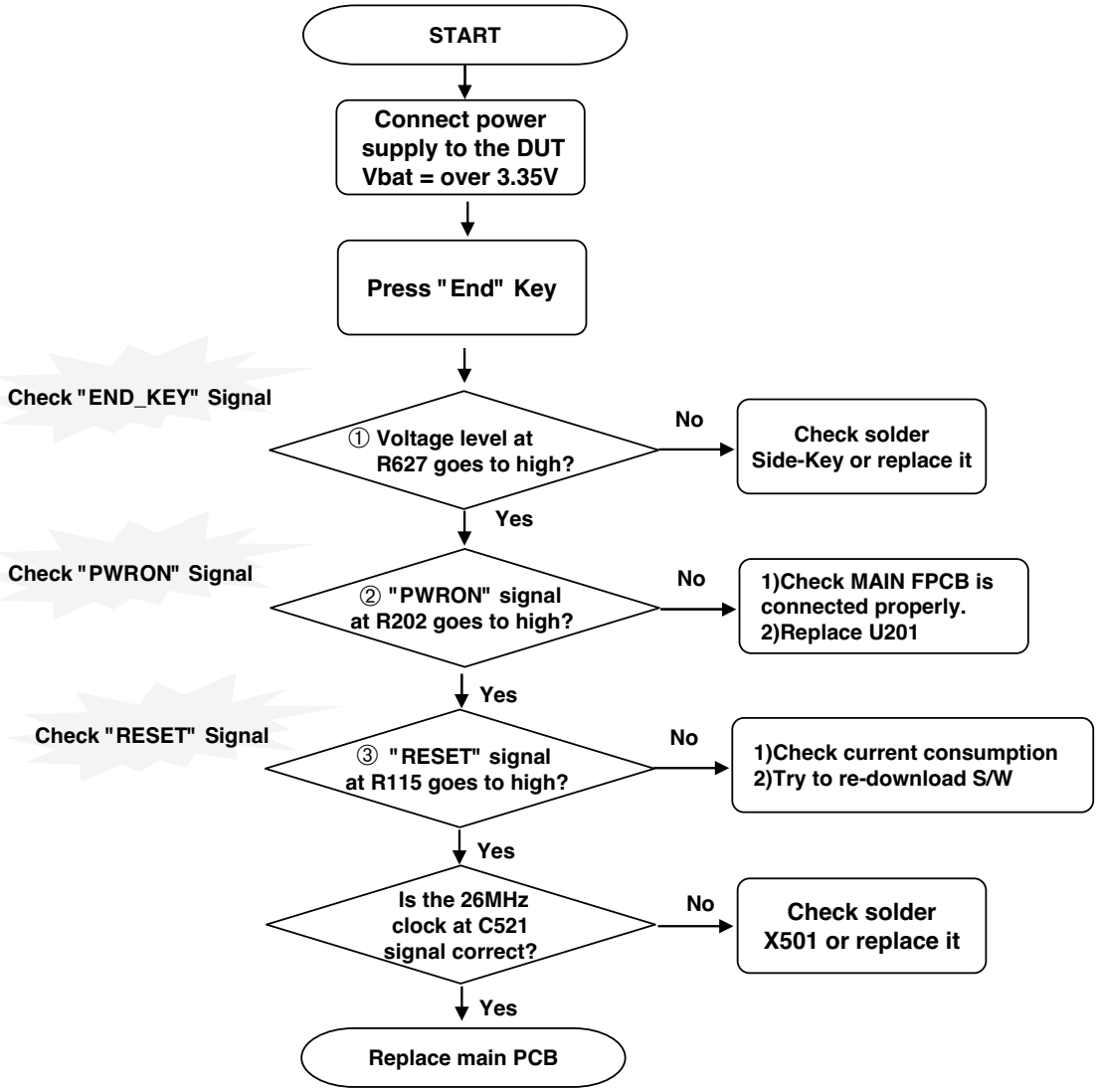




	Sibely	Capulet
R107	N/A	0 Ohm
R109	0 Ohm	N/A



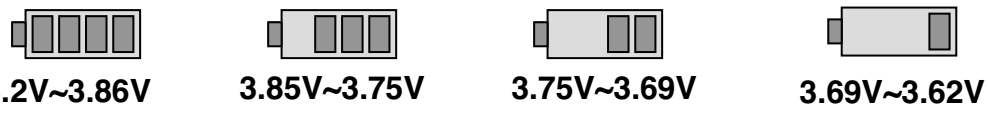
4. Trouble Shooting

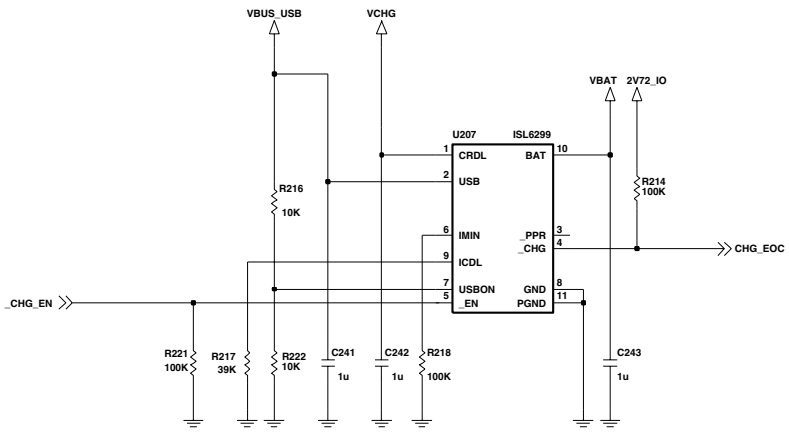


4.5 Charging Trouble

- Charging method : CC-CV
- Charger detect voltage : about 4.0V
- Charging time : 3h under
- Charging current : 500mA
- Cutoff current : 100mA
- Low battery alarm
  -. Idle : 3.62V
  -. Dedicated : 3.50V
- Switch-off voltage : 3.35V
- Charging temperature ADC range
  - ~ -20˚C : small charging operation.
  - -5˚C ~ 45˚C : charging.
  - 60˚C~ : not charging operation small charging operation.

1) Under very low temperature, battery capacity will be reduced. That can cause charging fauilure. LGE recommends charging within -5˚C ~ 45˚C.
2) Under very low temperature, battery voltage will change rapidly. It's natural property of Li-Ion battery.





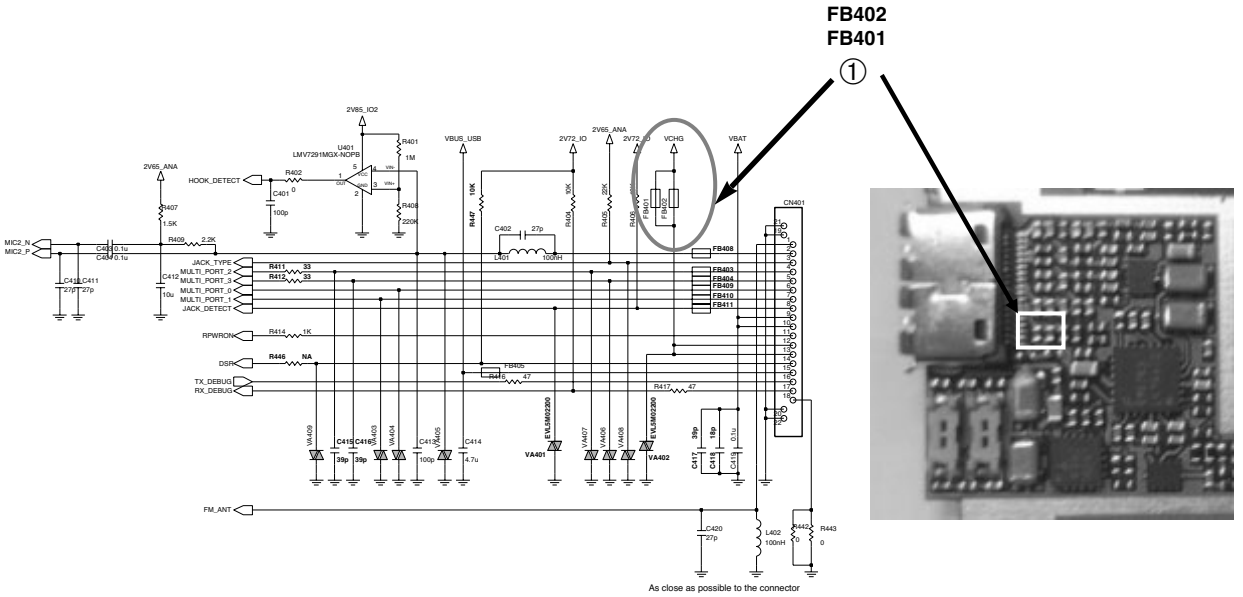
Charging Procedure

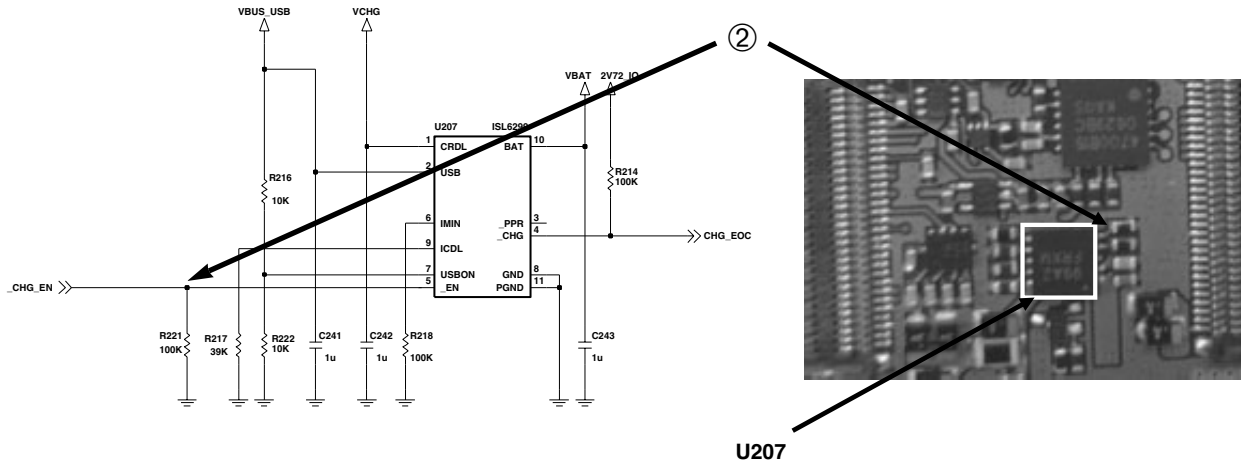
- Plug TA & detect charger
- Control the charging by _CHG_EN signal from S-GOLD2. When the mobile is turned-off, that signal fixed as "LOW"
- Charging Current flows into the Battery

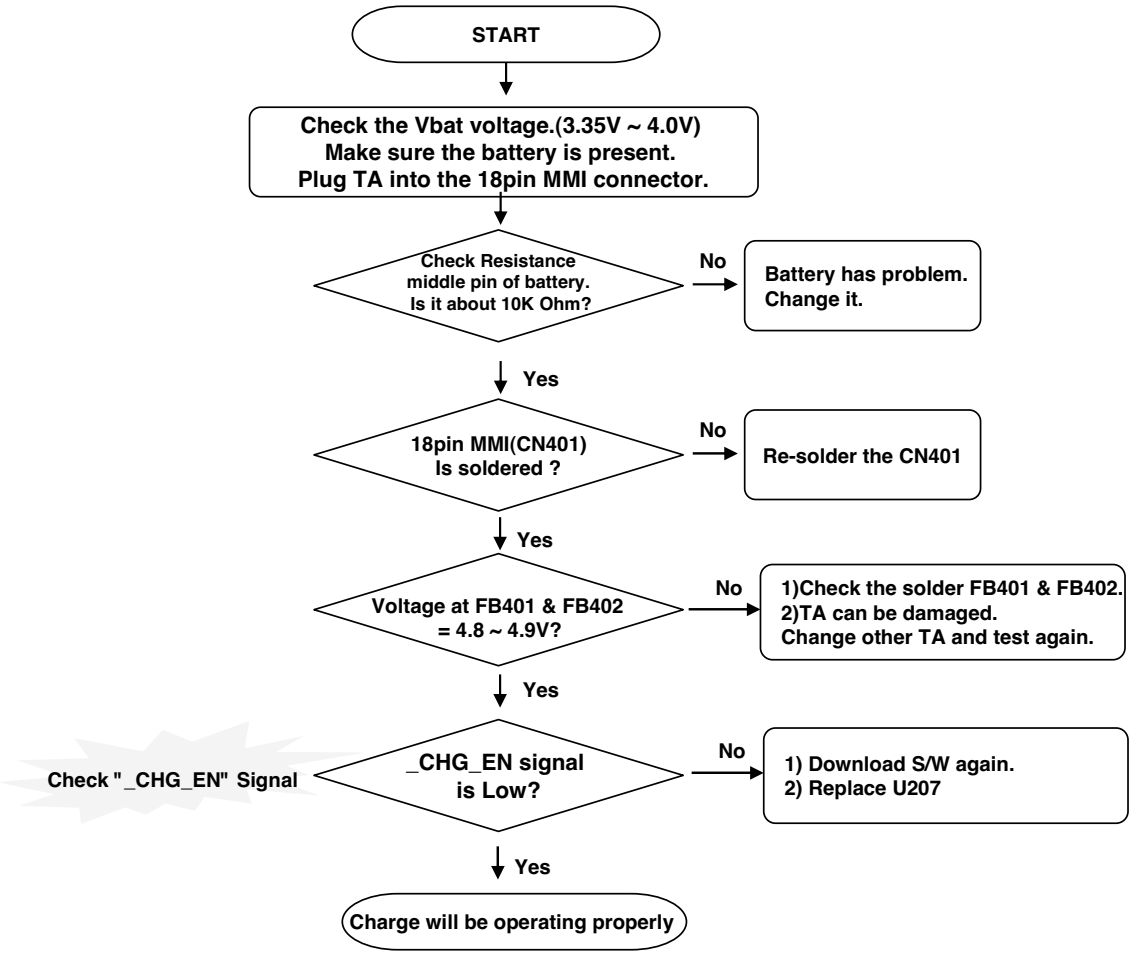
Check Points

- Connection of TA (check TA voltage 4.8V)
- Charging Current Path component voltage drop
- Battery voltage

4. Trouble Shooting

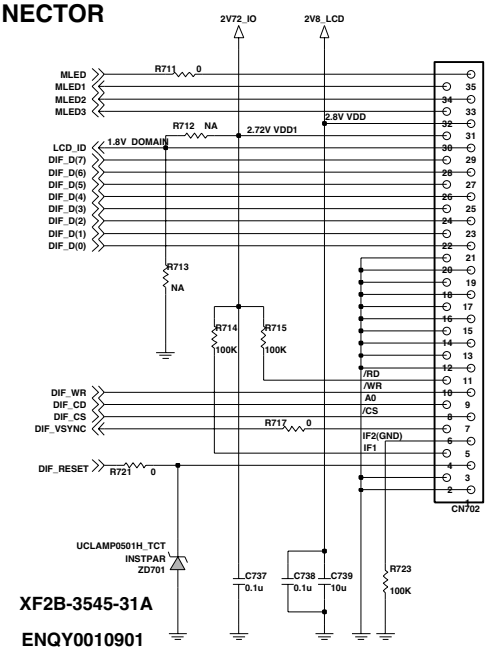


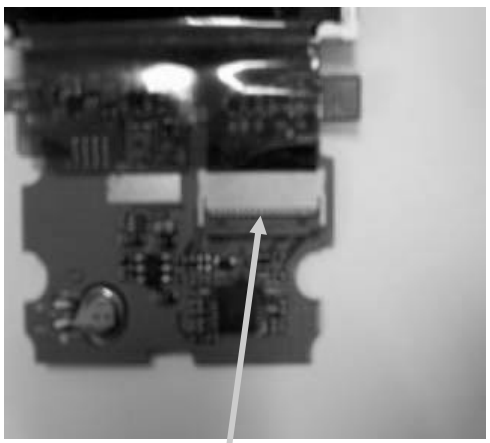



START
Check the Vbat voltage.(3.35V ~ 4.0V)
Make sure the battery is present.
Plug TA into the 18pin MMI connector.
Check Resistance middle pin of battery. Is it about 10K Ohm?
No
Battery has problem. Change it.
Yes
18pin MMI(CN401) Is soldered ?
No
Re-solder the CN401
Yes
Voltage at FB401 & FB402 = 4.8 ~ 4.9V?
No
1)Check the solder FB401 & FB402.
2)TA can be damaged.
Change other TA and test again.
Yes
Check "_CHG_EN" Signal
_CHG_EN signal is Low?
No
1) Download S/W again.
2) Replace U207
Yes
Charge will be operating properly

4.6 LCD Display Trouble

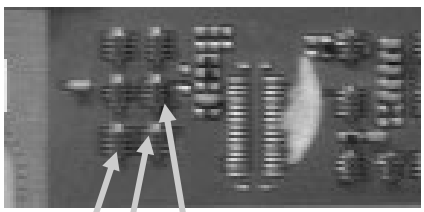
LCD CONNECTOR



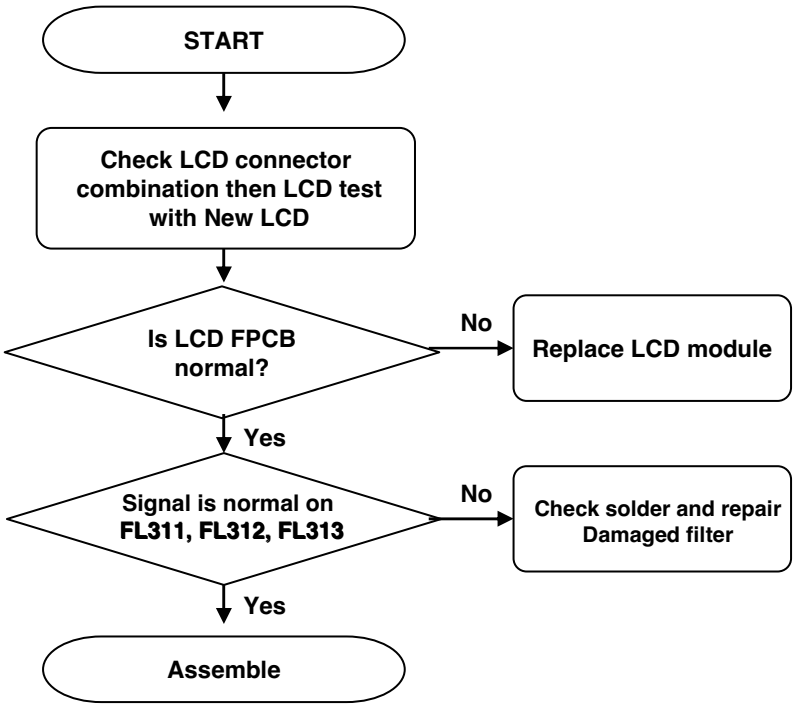


Check signal line disconnection of the LCD FPCB

LCD CONNECTOR

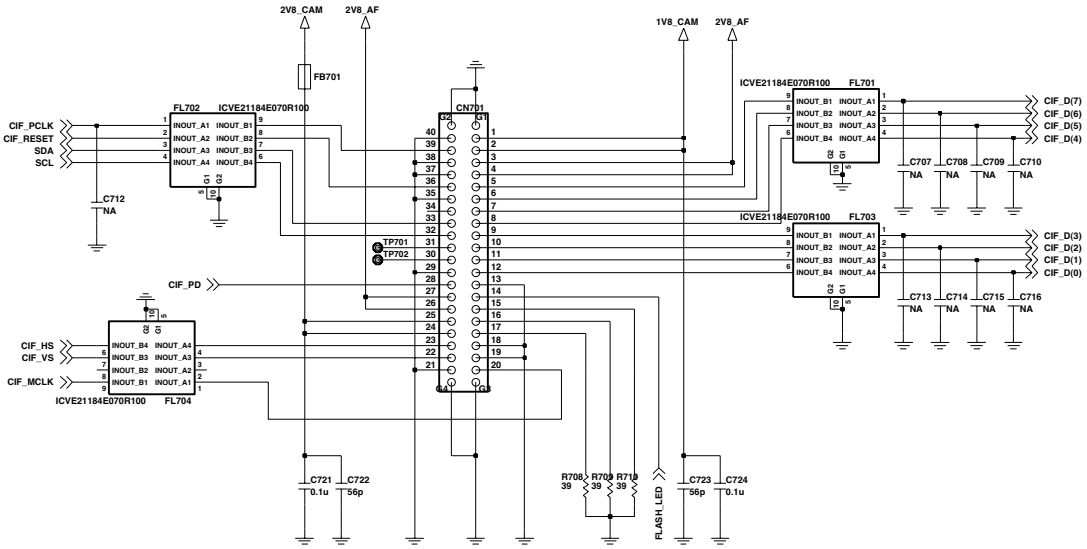


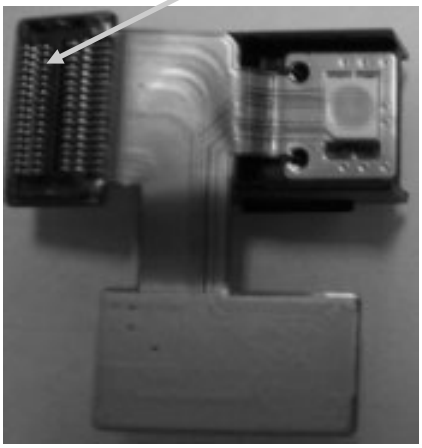
Check signal flow via EMI filter

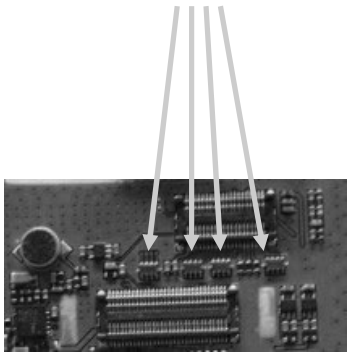

START
Check LCD connector combination then LCD test with New LCD
Is LCD FPCB normal?
No
Replace LCD module
Yes
Signal is normal on FL311, FL312, FL313
No
Check solder and repair Damaged filter
Yes
Assemble

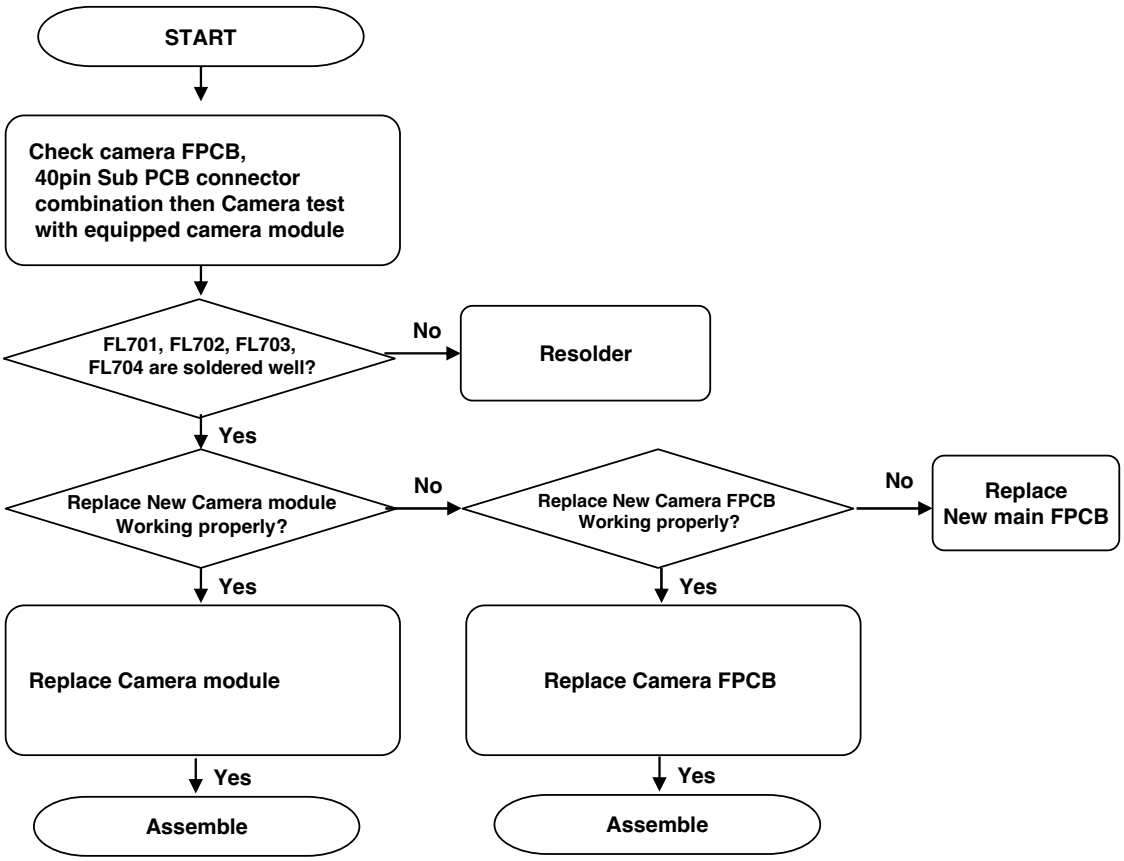
4.7 Camera Trouble

2M AF CAMERA I/F CONNECTOR

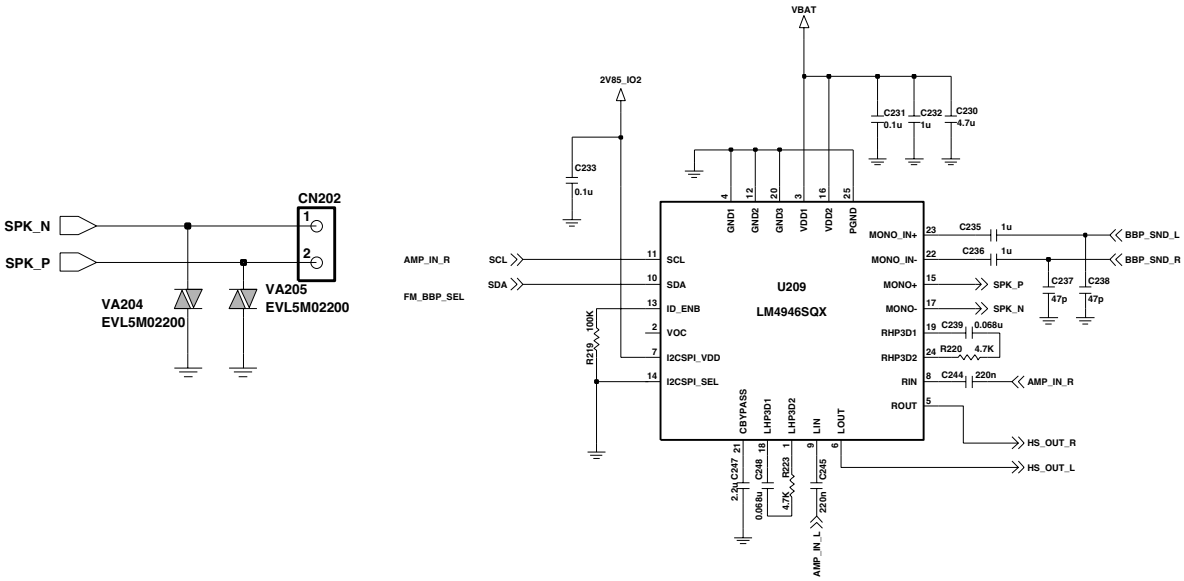


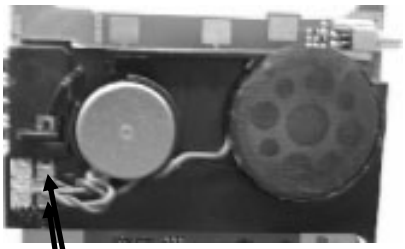





START
Check camera FPCB,
40pin Sub PCB connector
combination then Camera test
with equipped camera module
FL701, FL702, FL703,
FL704 are soldered well?
No
Resolder
Yes
Replace New Camera module
Working properly?
No
Replace New Camera FPCB
Working properly?
No
Replace
New main FPCB
Yes
Yes
Replace Camera module
Replace Camera FPCB
Yes
Yes
Assemble
Assemble

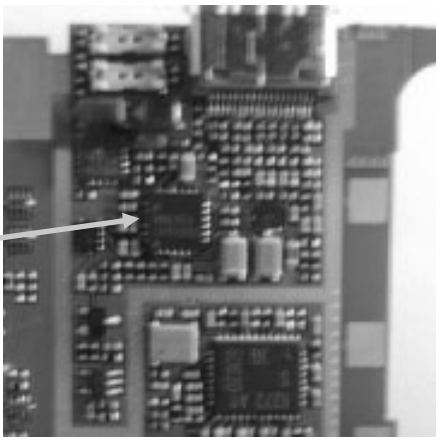
4.8 Speaker Trouble

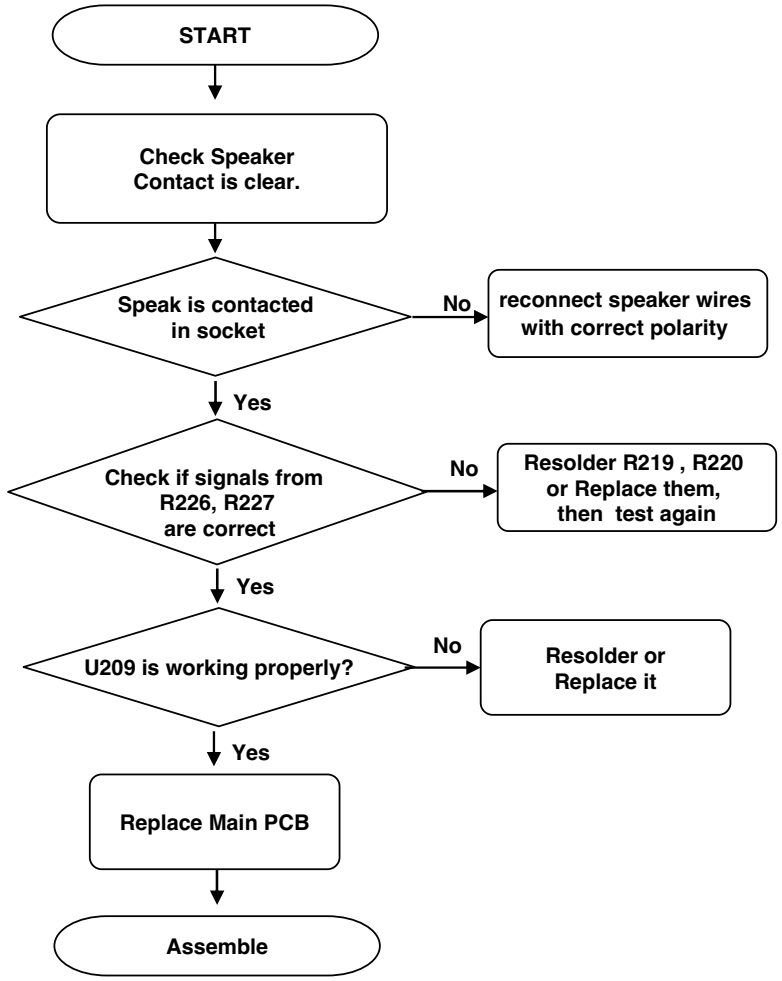




Check speaker contact

Check Audio amp,
In output signal



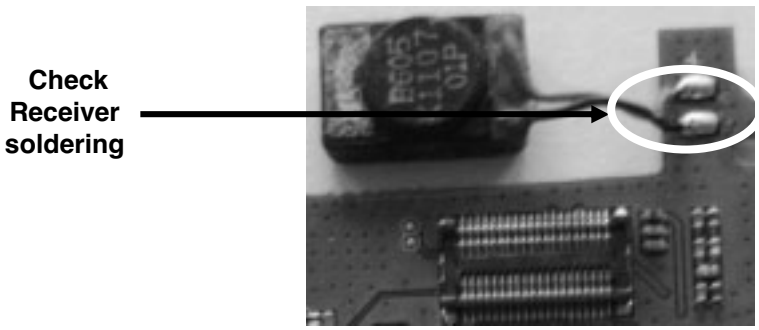

START
Check Speaker
Contact is clear.
Speak is contacted
in socket
No
reconnect speaker wires
with correct polarity
Yes
Check if signals from
R226, R227
are correct
No
Resolder R219 , R220
or Replace them,
then test again
Yes
U209 is working properly?
No
Resolder or
Replace it
Yes
Replace Main PCB
Assemble

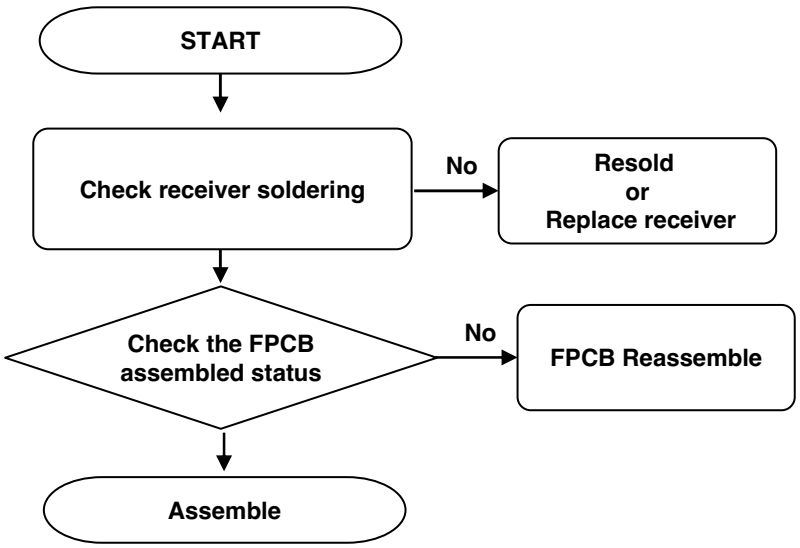
4.9 Receiver Trouble

Check Points

-Receiver soldering

-FPCB Assembled status





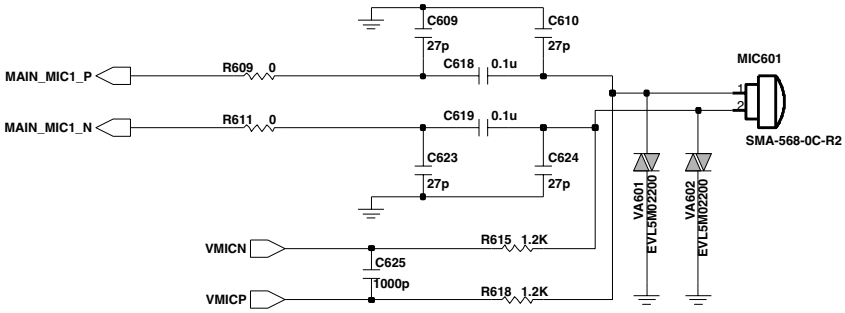
4.10 Microphone Trouble

Check Points

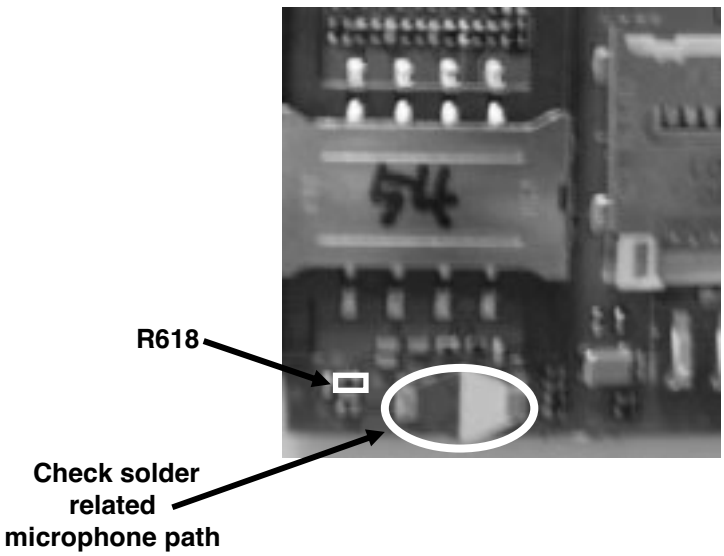
-Microphone hole

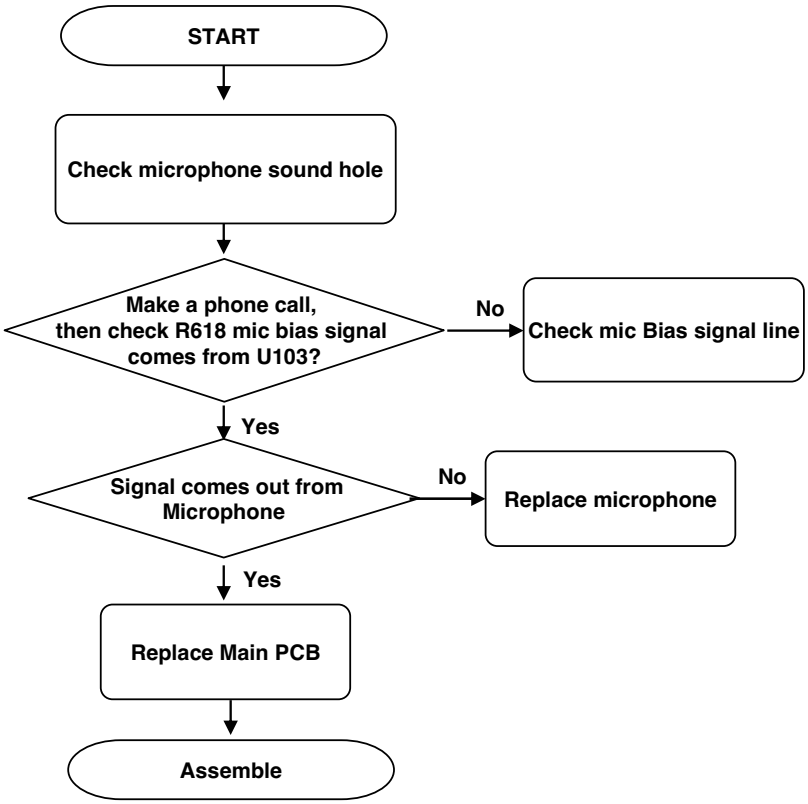
-Mic Bias & signal come from

MAIN MICROPHONE



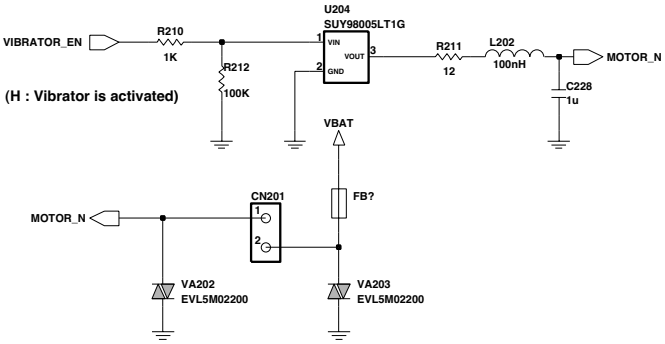
Checking Point

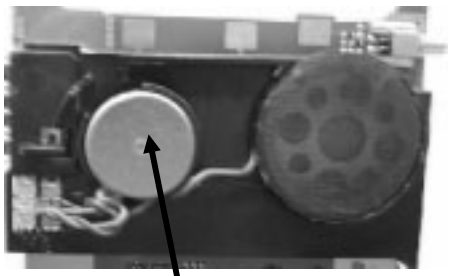



START
Check microphone sound hole
Make a phone call, then check R618 mic bias signal comes from U103?
No
Check mic Bias signal line
Yes
Signal comes out from Microphone
No
Replace microphone
Yes
Replace Main PCB
Assemble

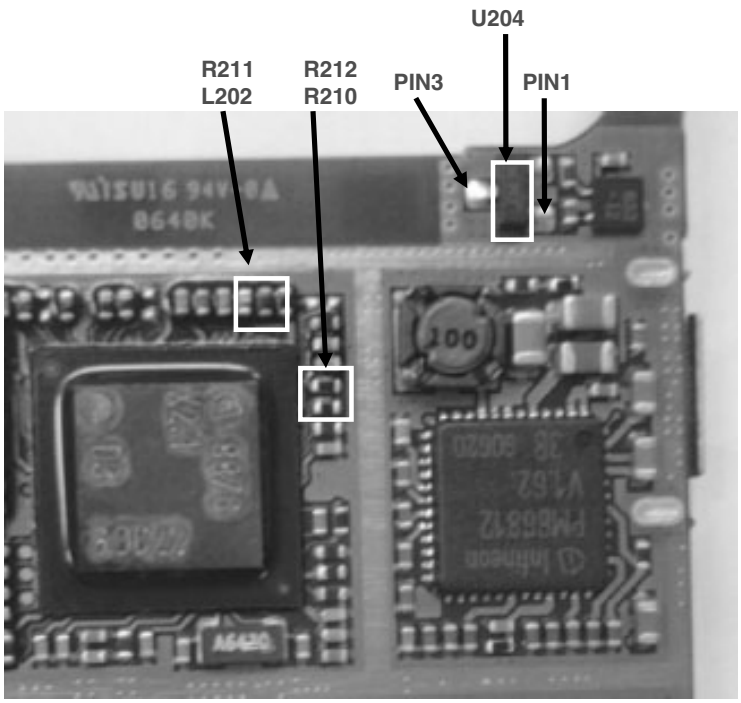
4.11 Vibrator Trouble

VIBRATOR



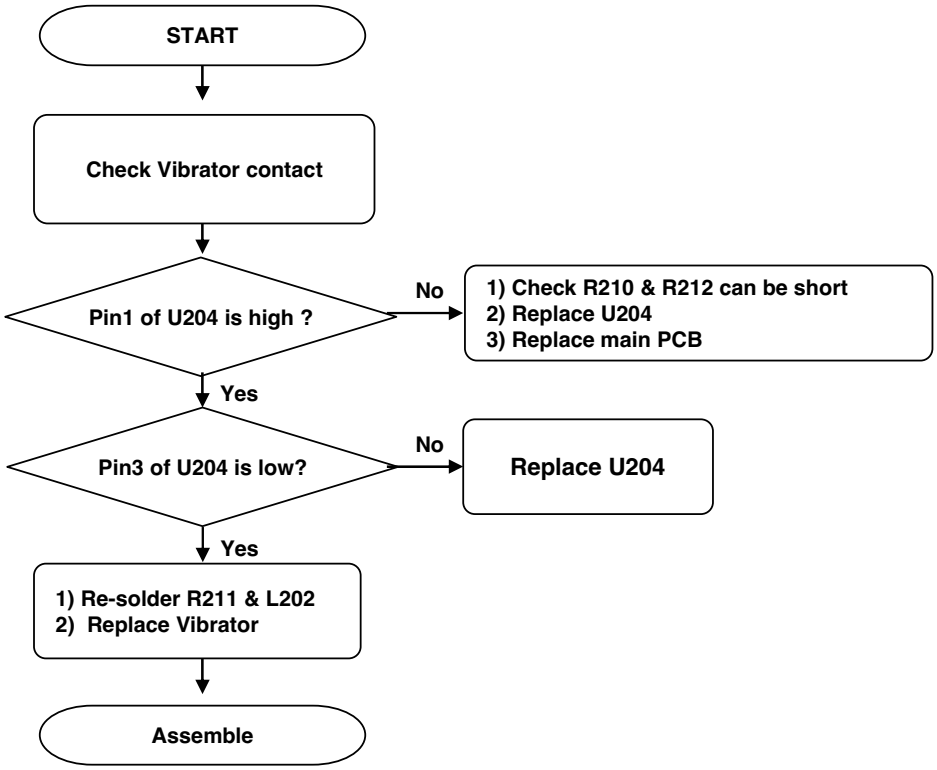


Check the contact is clear, if there is some obstacles then remove them

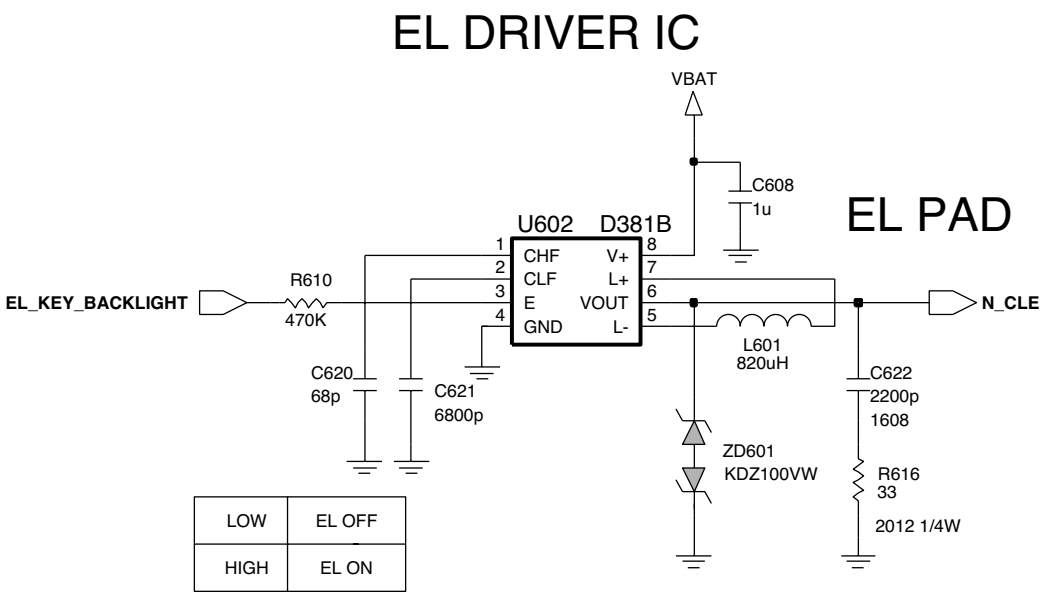


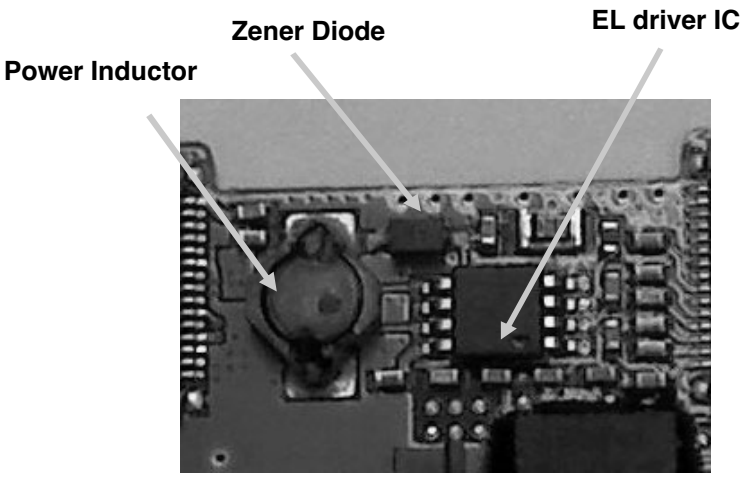
Check Points

- VCC lines (VBAT)
- Vibrator signal path
- The connection between the main board and vibrator module
- The soldering of socket
- The Vibrator (t=2.7mm)

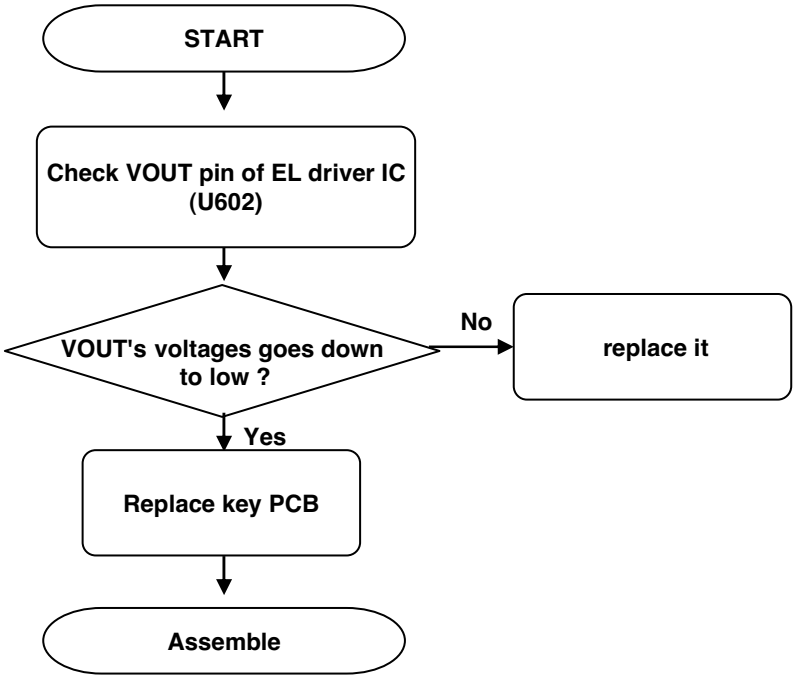

START
Check Vibrator contact
Pin1 of U204 is high ?
No
1) Check R210 & R212 can be short
2) Replace U204
3) Replace main PCB
Yes
Pin3 of U204 is low?
No
Replace U204
Yes
1) Re-solder R211 & L202
2) Replace Vibrator
Assemble

4.12 Keypad Backlight Trouble (EL driver)

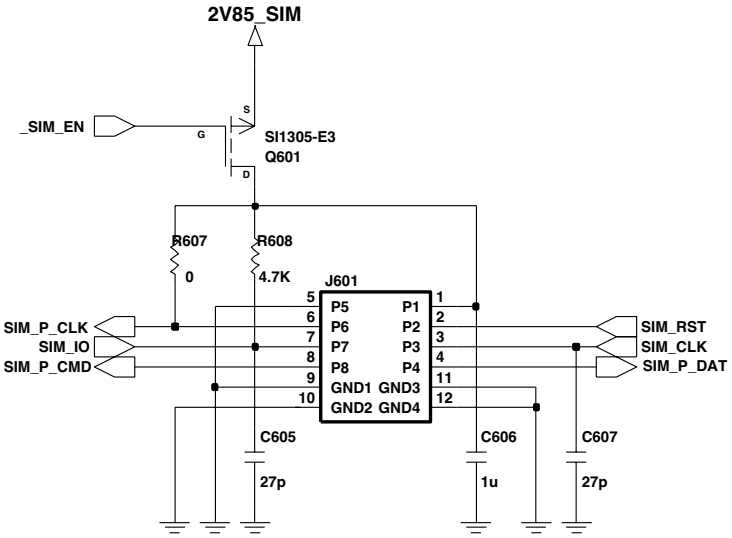


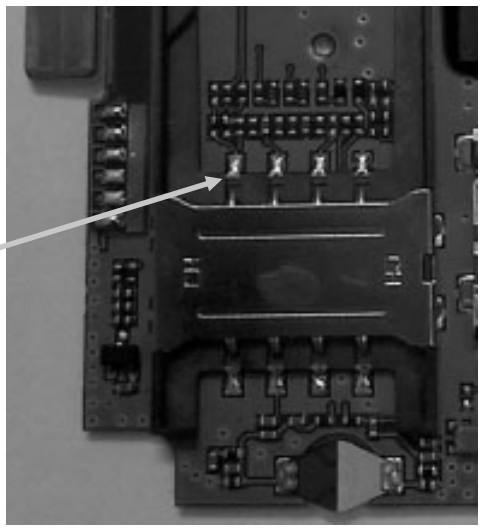


4. Trouble Shooting



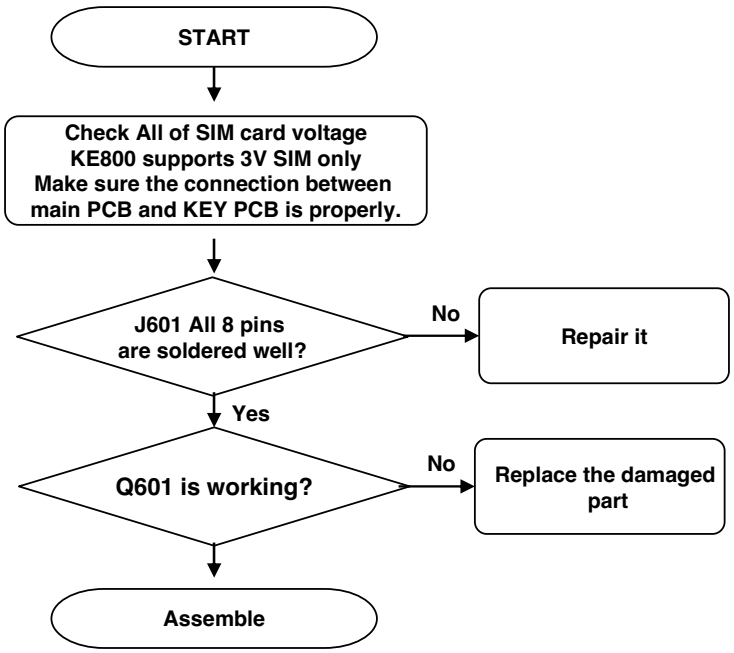
4.13 SIM Detect Trouble





Check soldering
all pin of socket

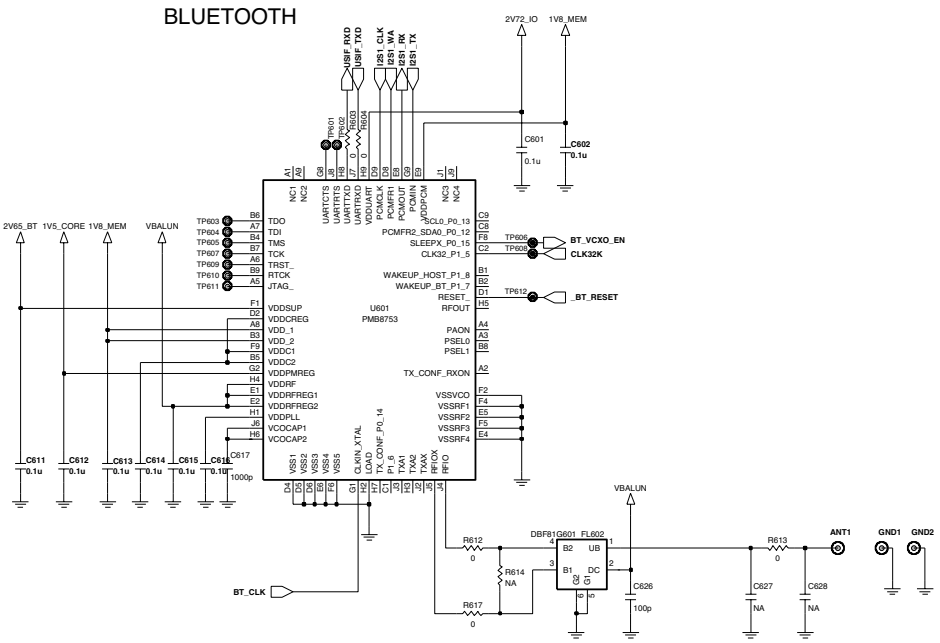
4. Trouble Shooting



4.14 Bluetooth Trouble

Check Points

- A condition of Bluetooth Antenna soldering
- Balun filter is correctly working
- Bluetooth data is perfectly flowed
- Power and clock signals are supplied in U202



Checking Points

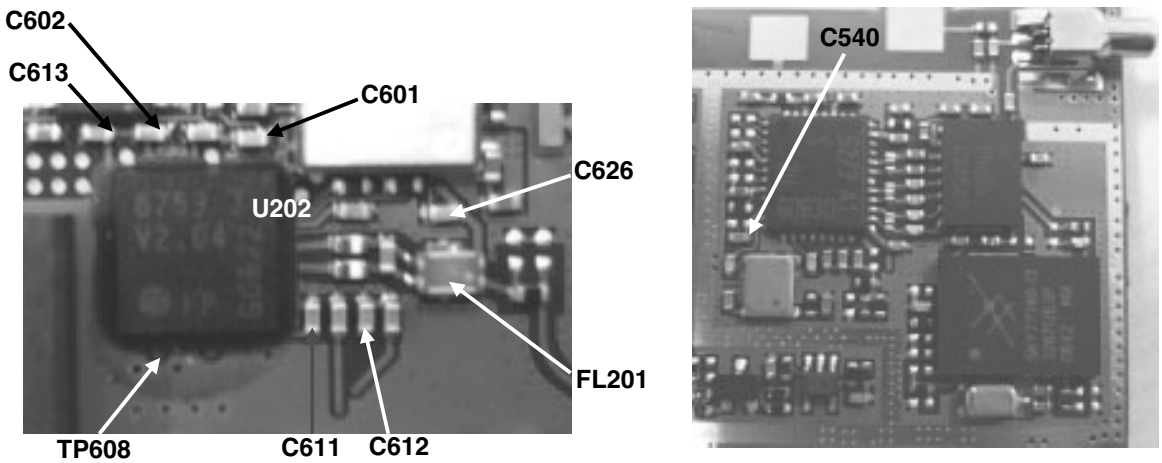
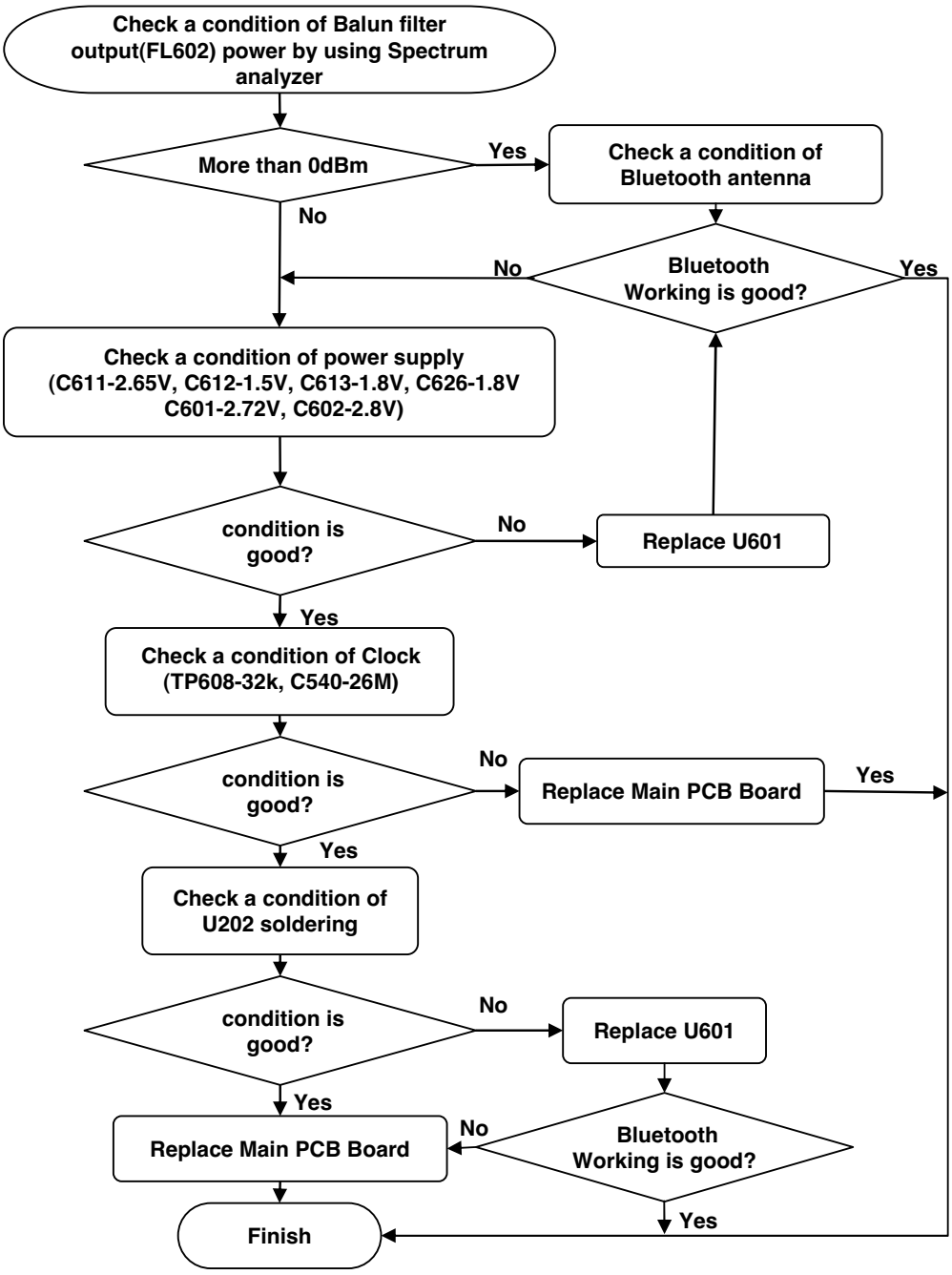


Figure 20. Bluetooth Part

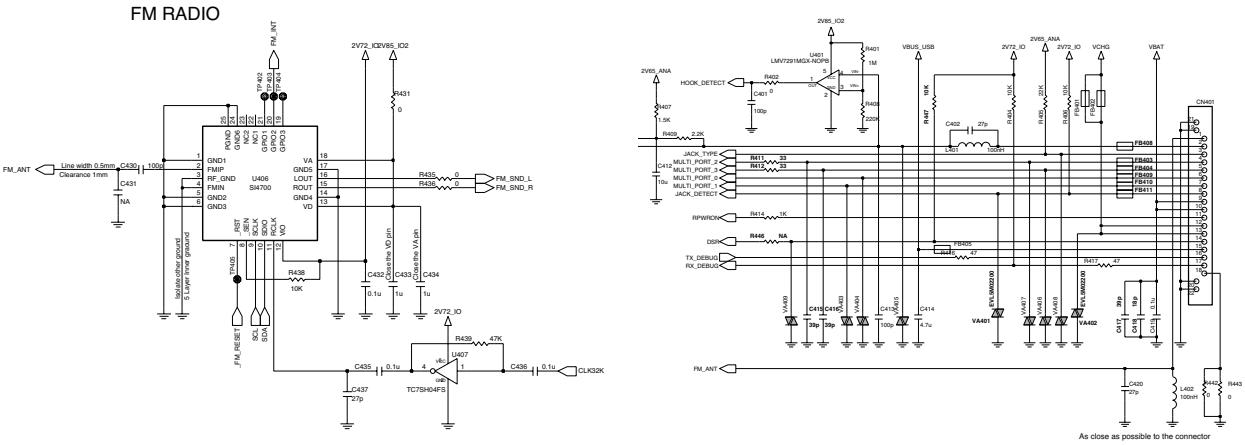
Checking Flow

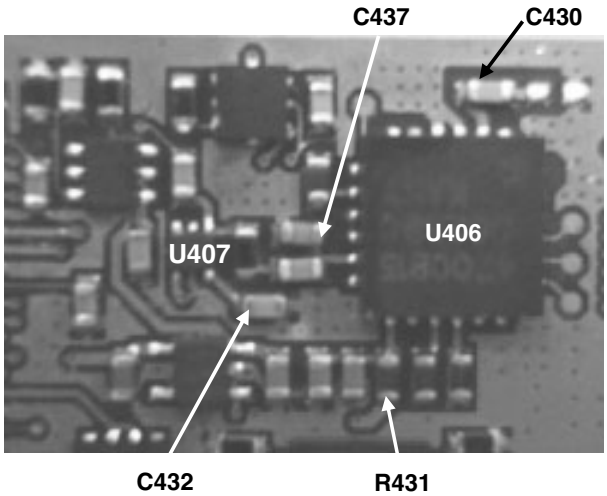


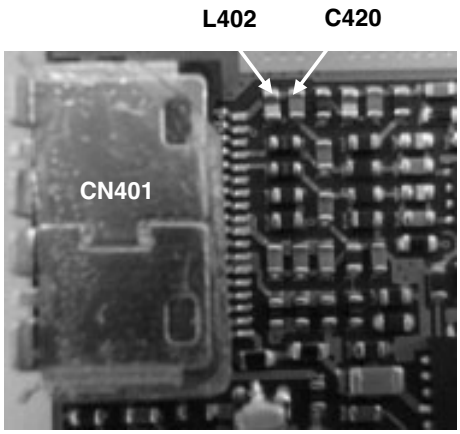
4.15 FM Radio trouble

Check Points

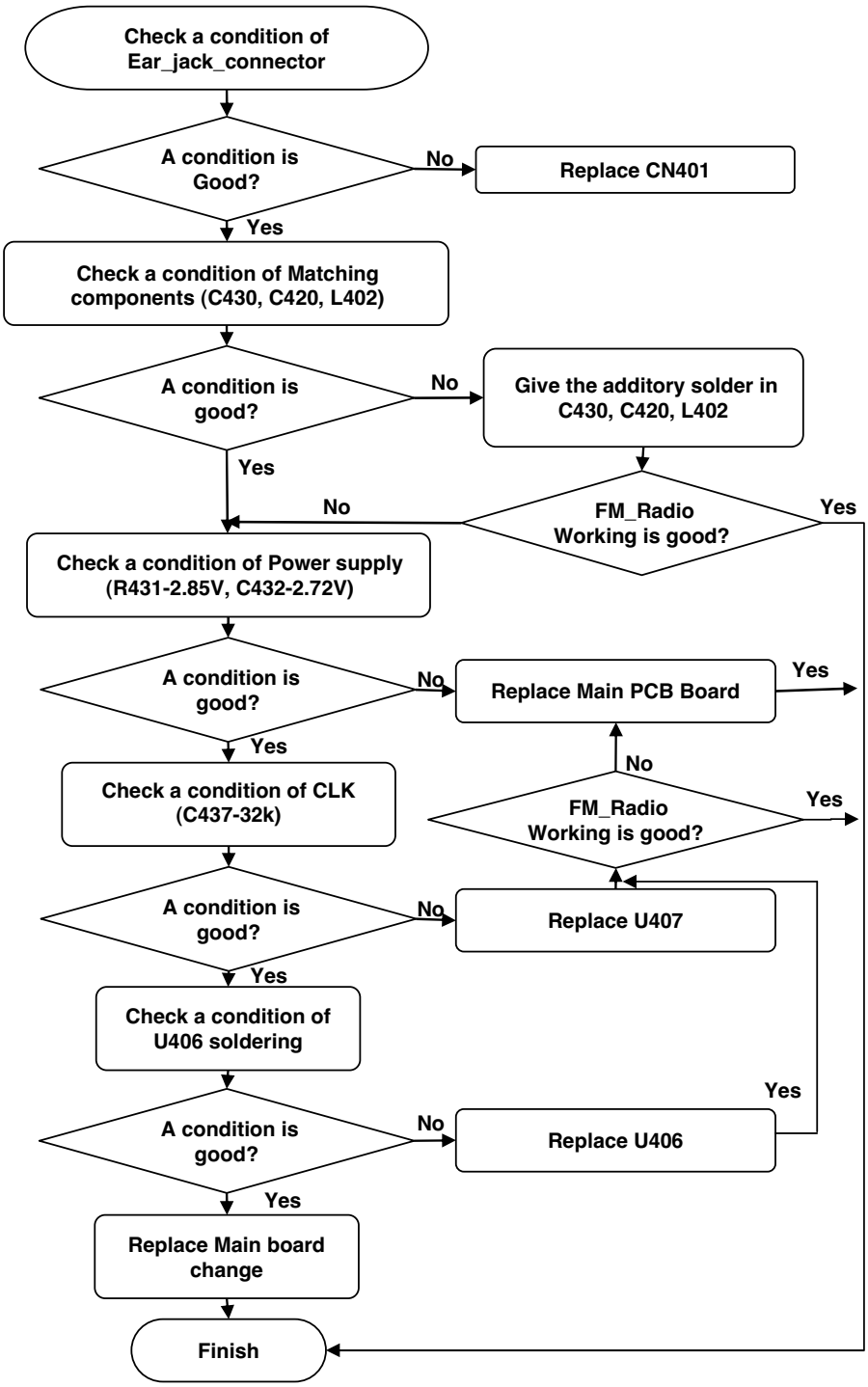
- Ear_mic_set is correctly operated as FM radio antenna (When user uses the FM radio function, Ear_mic_set must be connected in phone)
- A condition of FM_Radio module soldering
- FM_Radio signal is flowed correctly
- Power and clock signals are supplied in U406



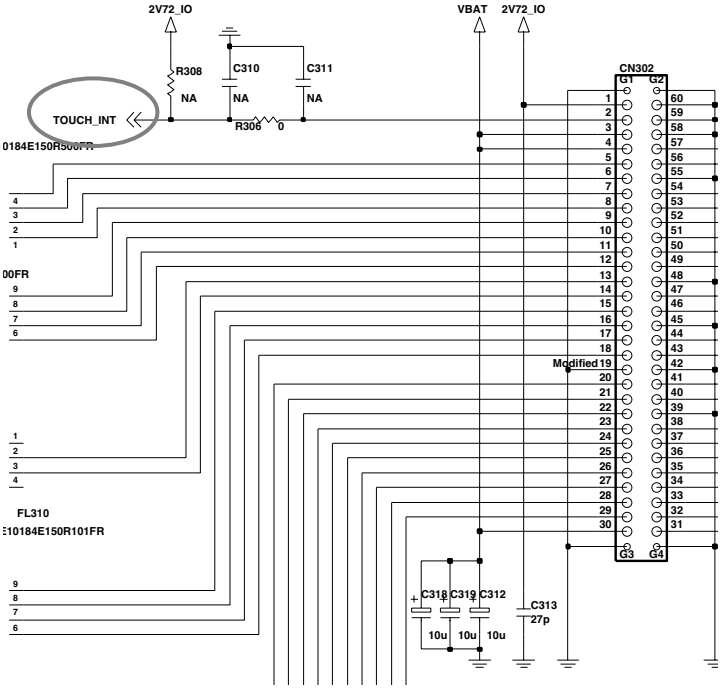


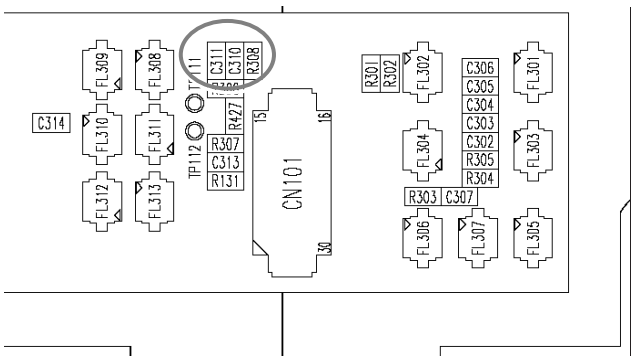


Checking Flow

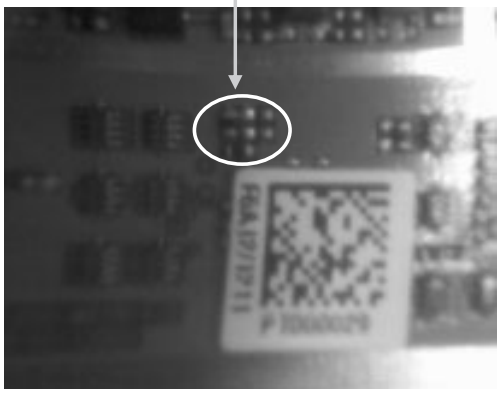


4.16. TOUCH PAD Trouble shooting

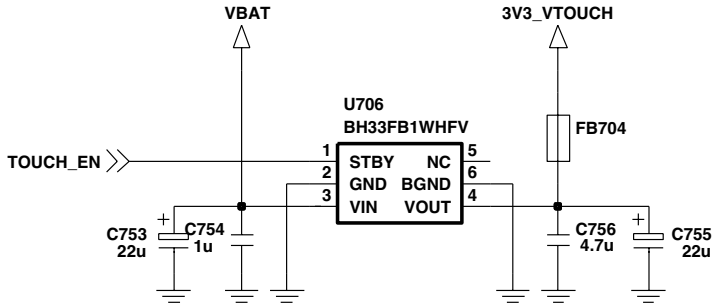




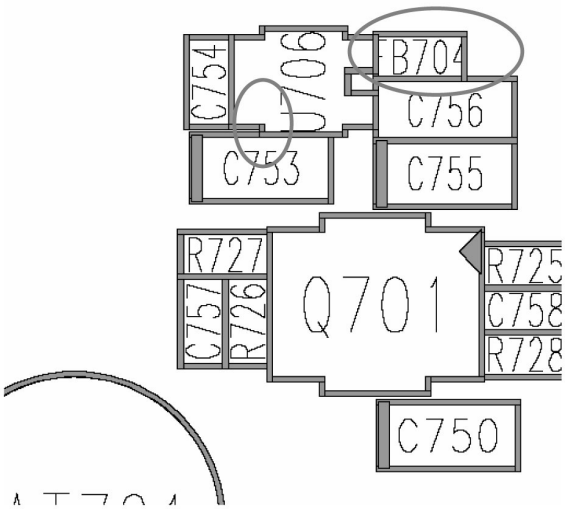
Check "TOUCH_INT" Signal at C311
It should be "Low" , when user press
Touch Button

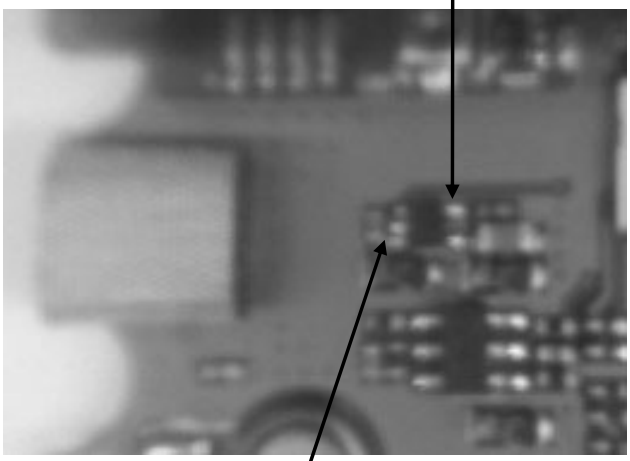


TOUCHPAD DRIVER LDO

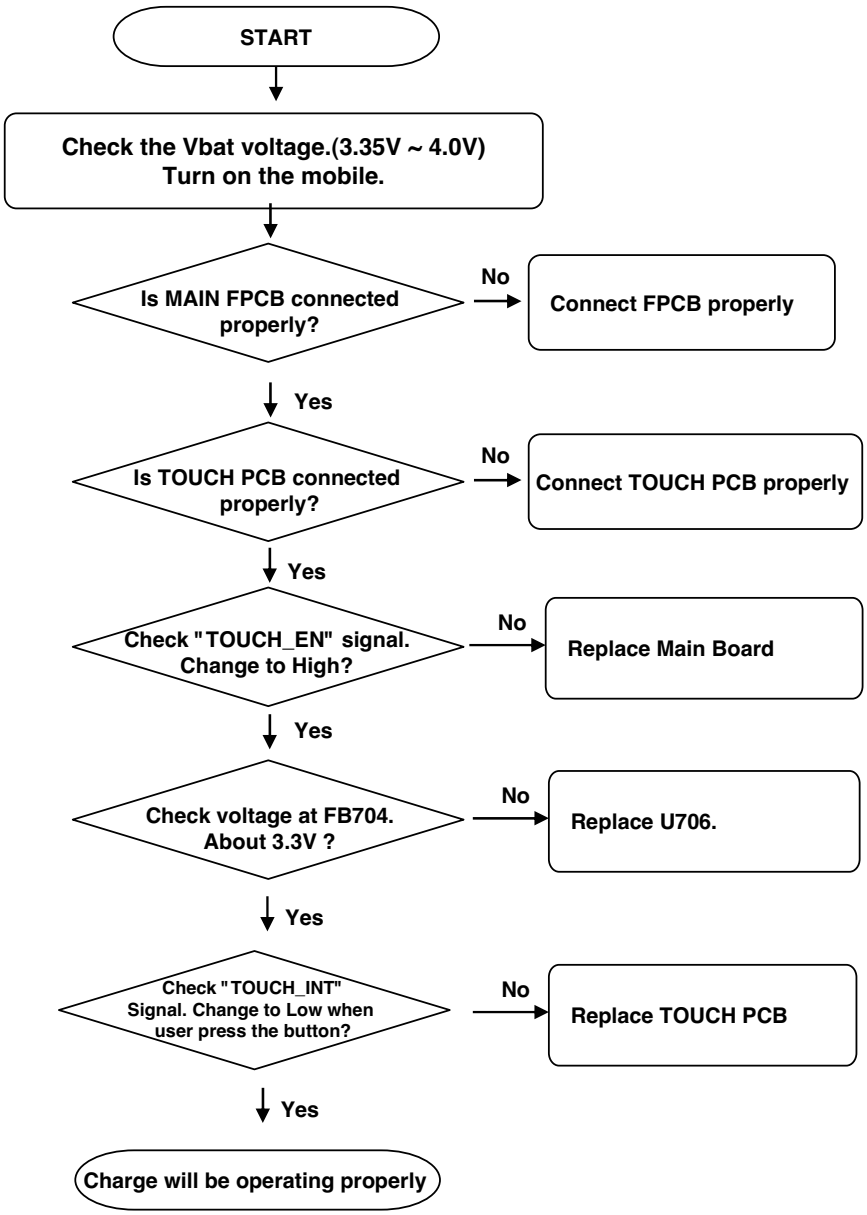


Check 3V3_VTOUCH Voltage. It should be 3.3V
When TOUCH_EN = High.





Check "TOUCH_EN" Signal. It should be High


START
Check the Vbat voltage.(3.35V ~ 4.0V)
Turn on the mobile.
Is MAIN FPCB connected properly?
No
Connect FPCB properly
Yes
Is TOUCH PCB connected properly?
No
Connect TOUCH PCB properly
Yes
Check "TOUCH_EN" signal. Change to High?
No
Replace Main Board
Yes
Check voltage at FB704. About 3.3V ?
No
Replace U706.
Yes
Check "TOUCH_INT" Signal. Change to Low when user press the button?
No
Replace TOUCH PCB
Yes
Charge will be operating properly

4.17. Multimedia Microphone Trouble

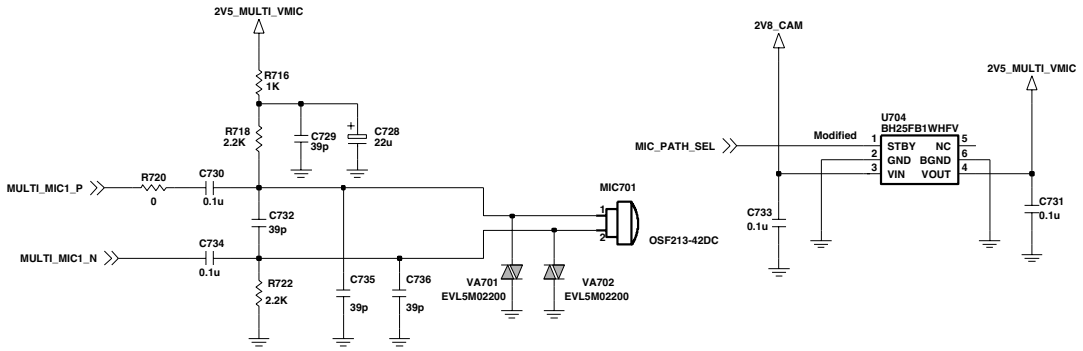
Check Points

-Mic Bias output form multimedia MIC LDO

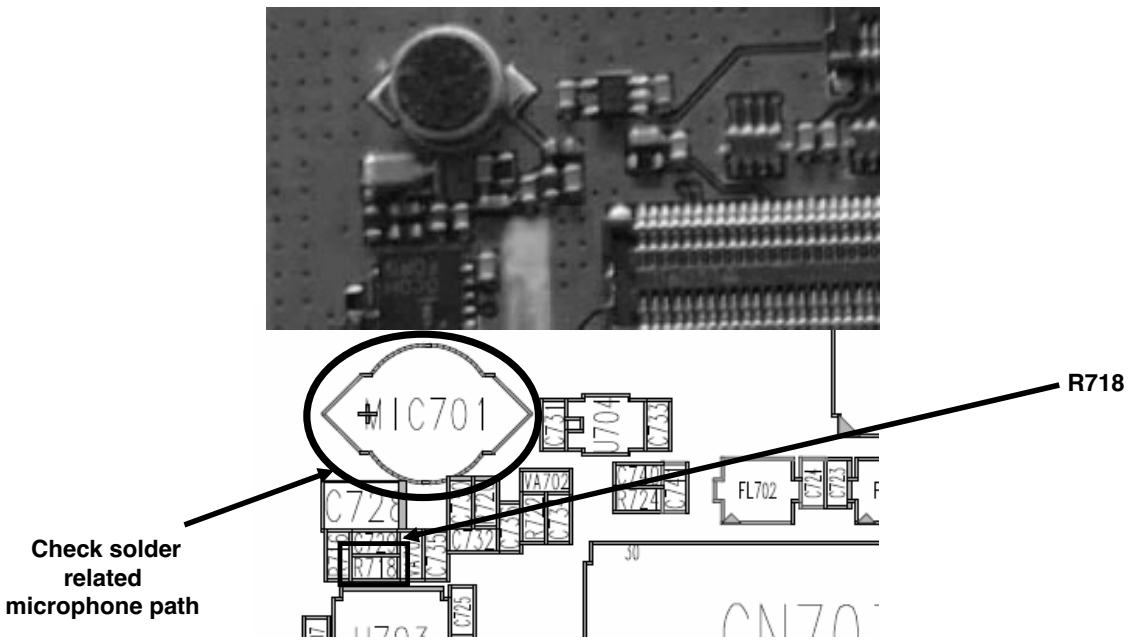
-Microphone output

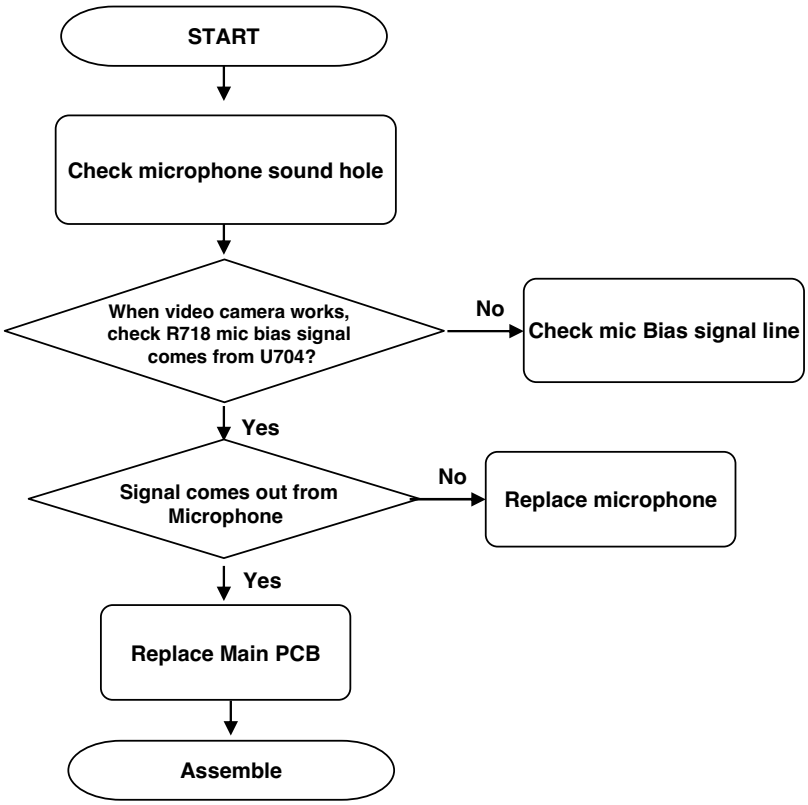
MULTI MICROPHONE

MULTIMEDIA MIC LDO



Checking Point




START
Check microphone sound hole
When video camera works, check R718 mic bias signal comes from U704?
No
Check mic Bias signal line
Yes
Signal comes out from Microphone
No
Replace microphone
Yes
Replace Main PCB
Assemble

4.18. 18pin Multi-Port Receptacle

Check Points

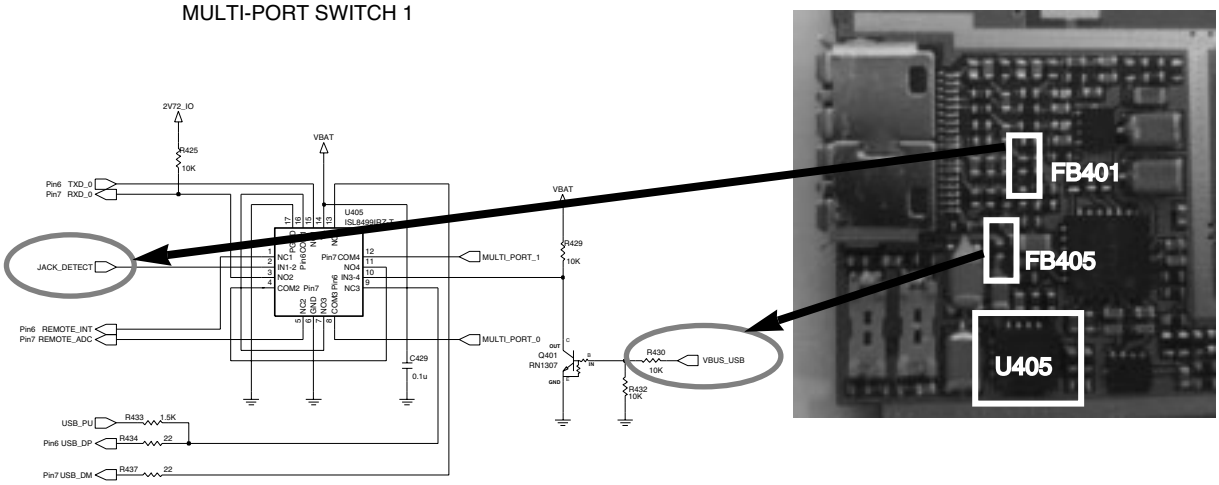
-Signal Line connection

-Correct control signal for each function

#	Pin Name	Function1	Function2	Function3
1	FM_ANT	FM radio ANT	DC GND	
2	MIC2P	Headset Mic. input		
3	JACK_TYPE	External deviceís type		
4	MULTI_PORT2	CTS(UART1)	Stereo output Left	
5	MULTI_PORT3	RTS(UART1)	Stereo output Right	
6	MULTI_PORT0	USB Data+	TXD(UART1)	Remote control Key detection
7	MULTI_PORT1	USB Data-	RXD(UART1)	Remote control Key input
8	JACK_DETECT	Detection of jack plug-in		
9	VBAT	Power supply		
10	VBAT	Power supply		
11	RPWRON	Remote power-on		
12	VCHG	Charging Power supply		
13	VCHG	Charging Power supply		
14	DSR	Reserved		
15	VUSB_USB	External USB power supply		
16	TX_DEBUG	TXD(UART2)		
17	RX_DEBUG	RXD(UART2)		
18	GND	GND		

4.18.1 Multi-Port Switch 1

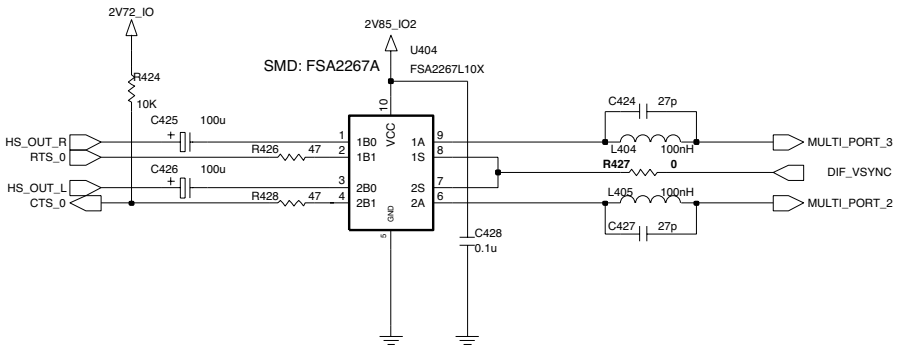
MULTI-PORT SWITCH 1



Control		Signal Connection		Application
VBUS_USB	JACK_DETECT	MULTIPORT0	MULTIPORT1	
Low	X	USB_DP	USB_DM	USB
High	High	TXD	RXD	UART1
High	Low	REMOTE_INT	REMOTE_ADC	Headset

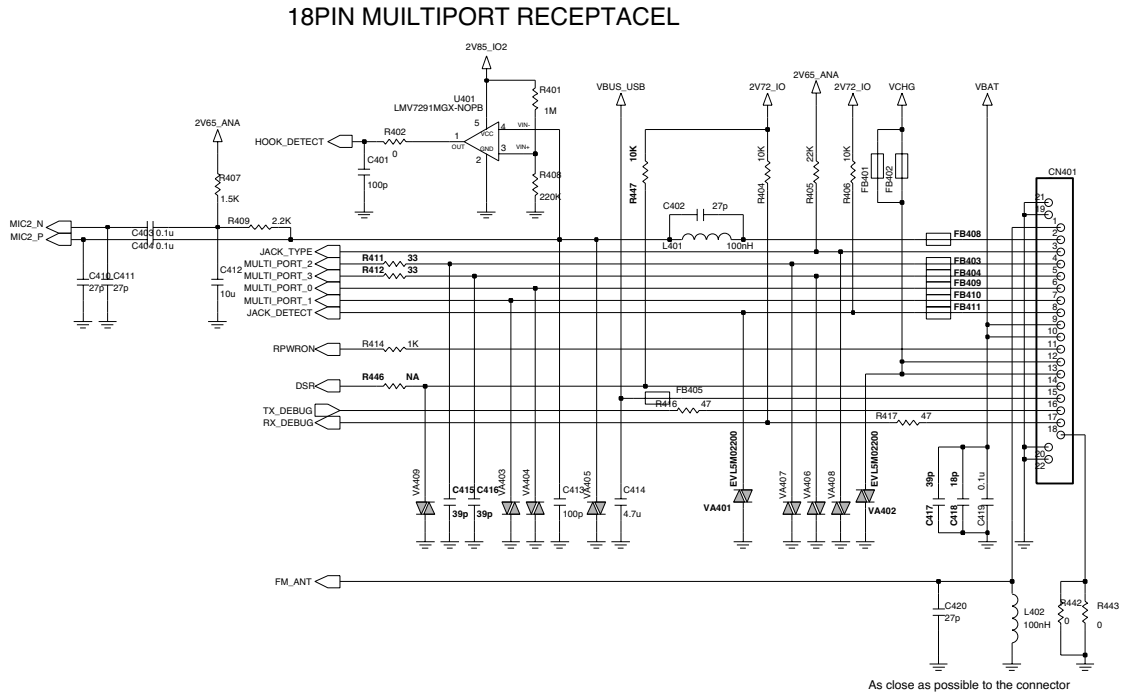
4.18.2 Multi-Port Switch 2

MULTI-PORT SWITCH 2

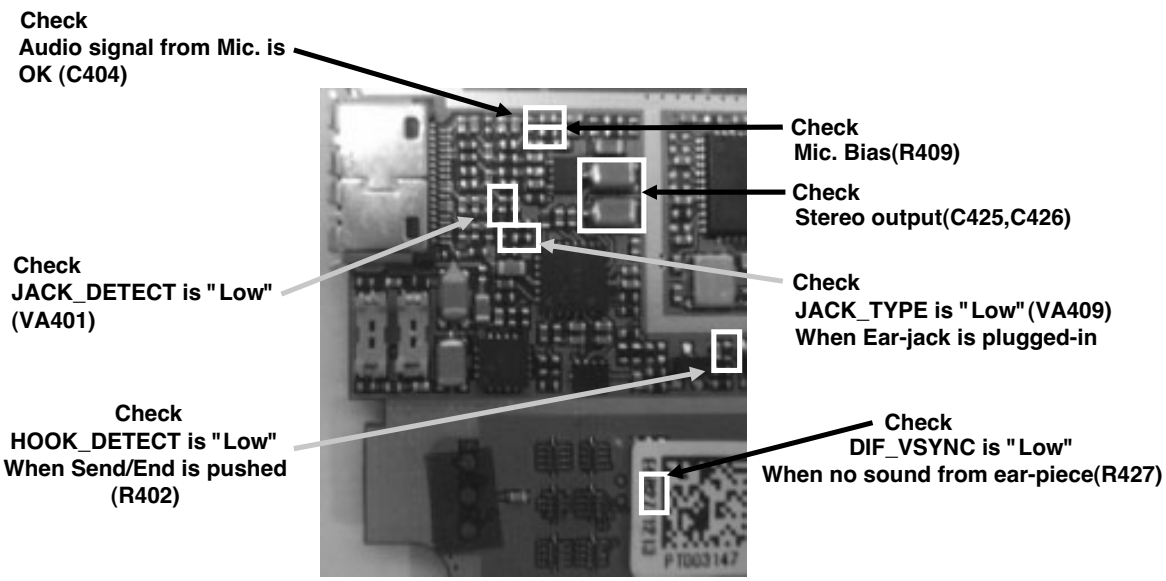


Control	Signal Connection		Application
DIF_VSYNC	MULTIPORT3	MULTIPORT2	
High(1.8V)	RTS	CTS	UART1
Low	HS_OUT_R	HS_OUT_L	Headset

4.18.3 Headset Trouble



As close as possible to the connector



4.19 RF PART TROUBLESHOOTING

4.19.1 RF Components

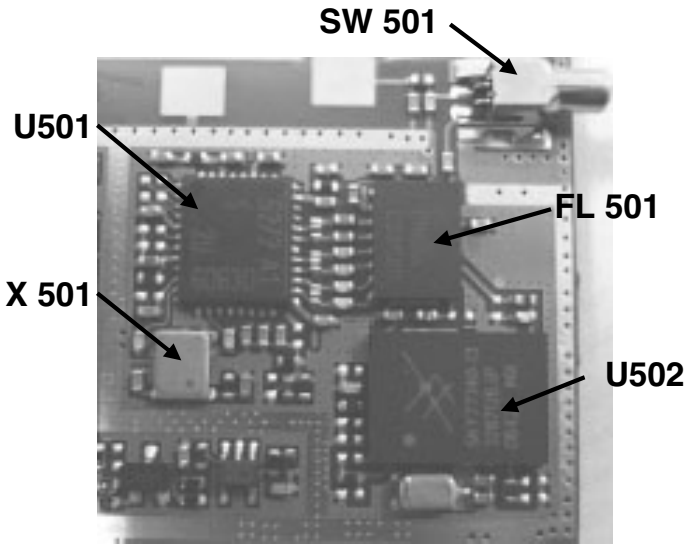


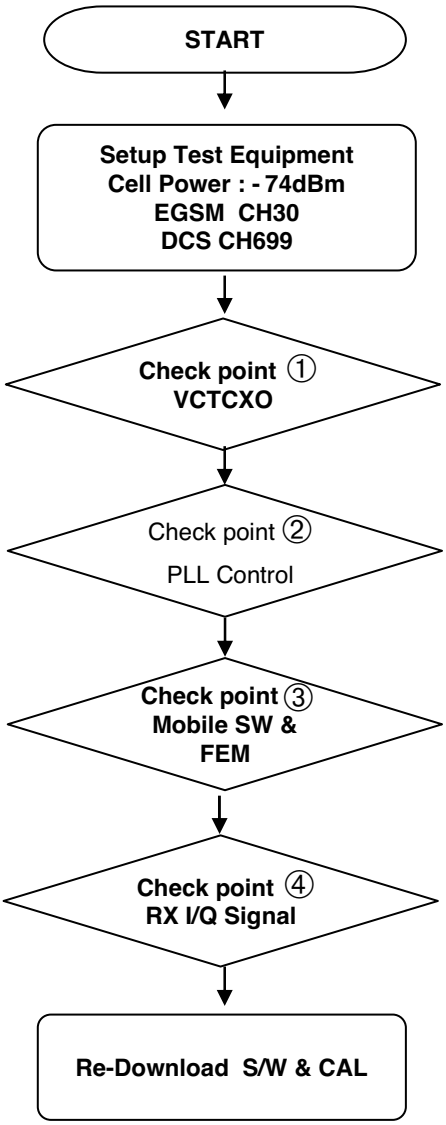
Figure 1. RF Components Placement

REFERENCE	PART Description
U502	PAM (Power Ampilifier Module)
X501	VCTCXO (26MHz)
FL501	FEM (Front End Module)
U501	Transceiver
SW501	Mobile Switch

Figure 1. RF Components Placement

4.19.2 Trouble Shooting of Receiver Part

Checking Flow



Checking Point

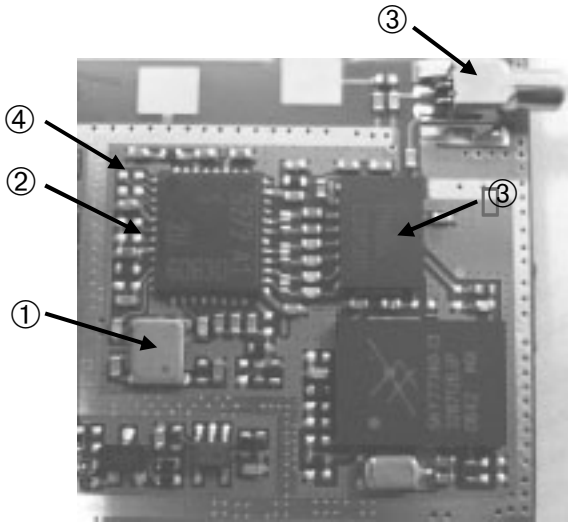


Figure 2. Receiver Part

4.19.3 Checking VCTCXO Circuit

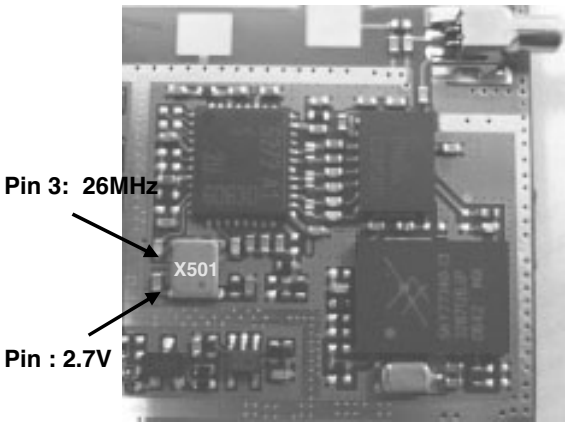
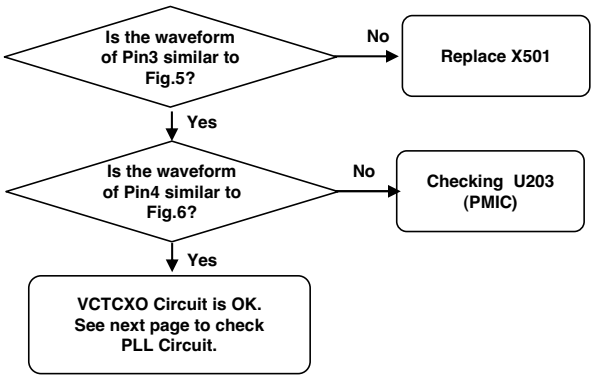


Figure 3. VCTCXO

Checking Flow



VCTCXO Circuit Diagram

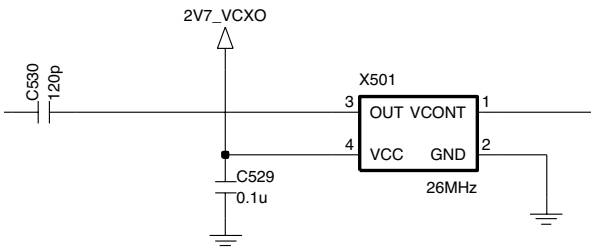


Figure 4. VCTCXO Cicuit

Waveform

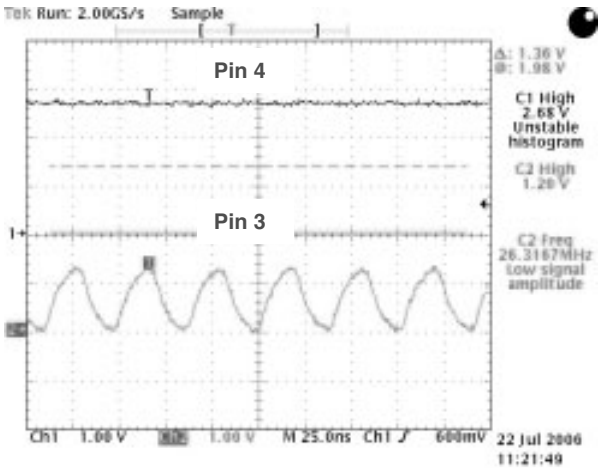


Figure5. VCTCXO Waveform

4.19.4 Checking PLL Control signals

Checking Points

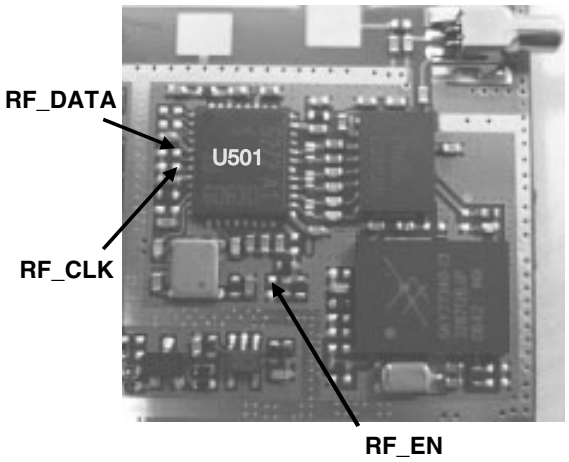
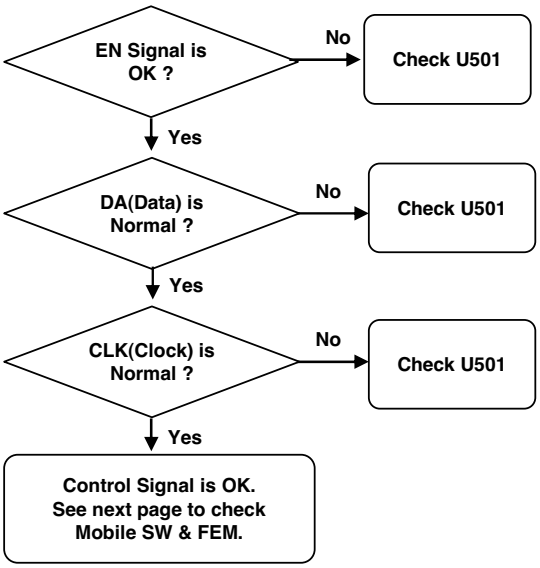


Figure 6. Transceiver

Checking Flow



RF Transceiver Circuit Diagram

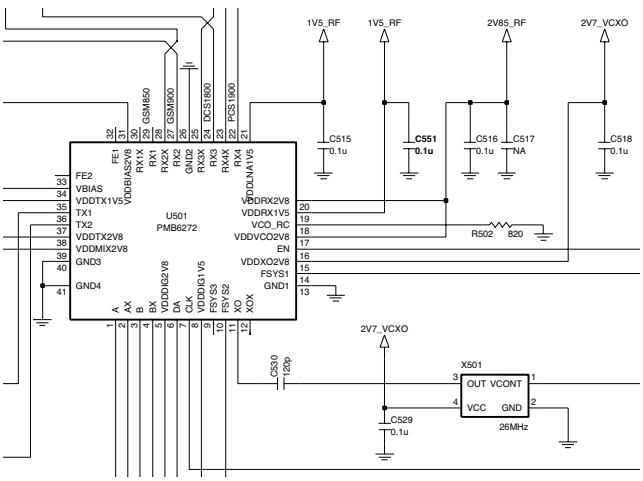


Figure7. Transceiver Circuit

Waveform

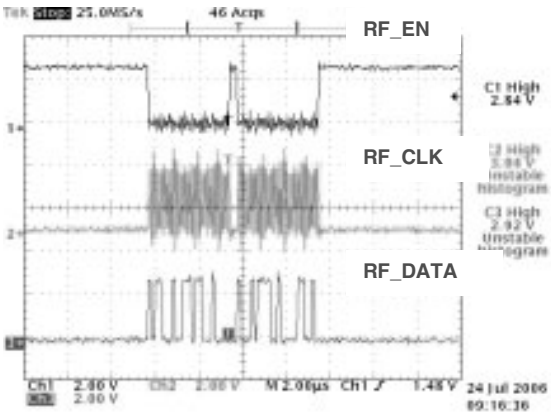


Figure 8. PLL Control Waveform

4.19.5 Checking FEM & Mobile SW

Mobile SW & FEM Circuit Diagram

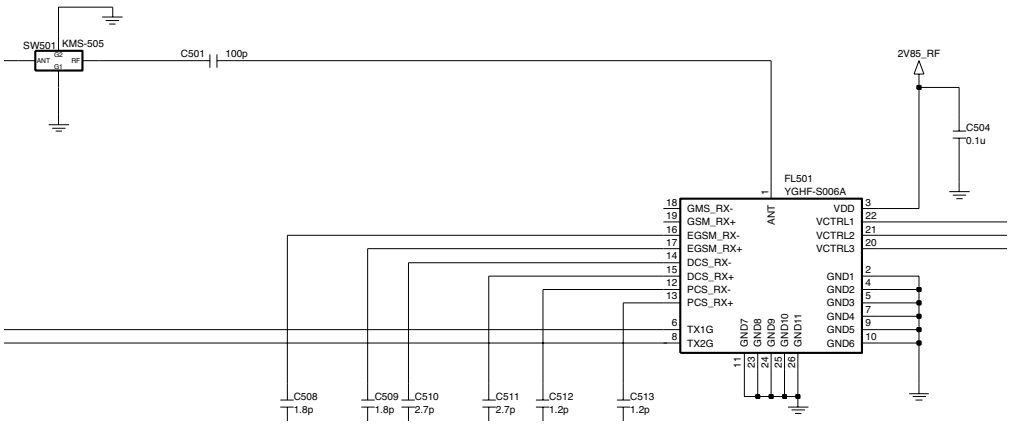


Figure 9. Mobile SW & FEM Circuit

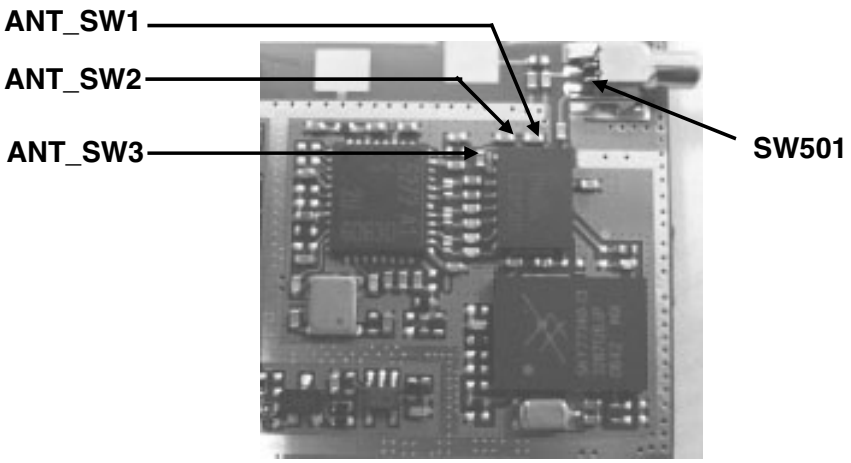


Figure 10. Mobile SW & FEM

RX Mode	EGSM	DCS	PCS
ANT_SW1	Off	Off	Off
ANT_SW2	On	Off	Off
ANT_SW3	Off	On	Off

Table 2. FEM RX Control Logic

Checking Flow

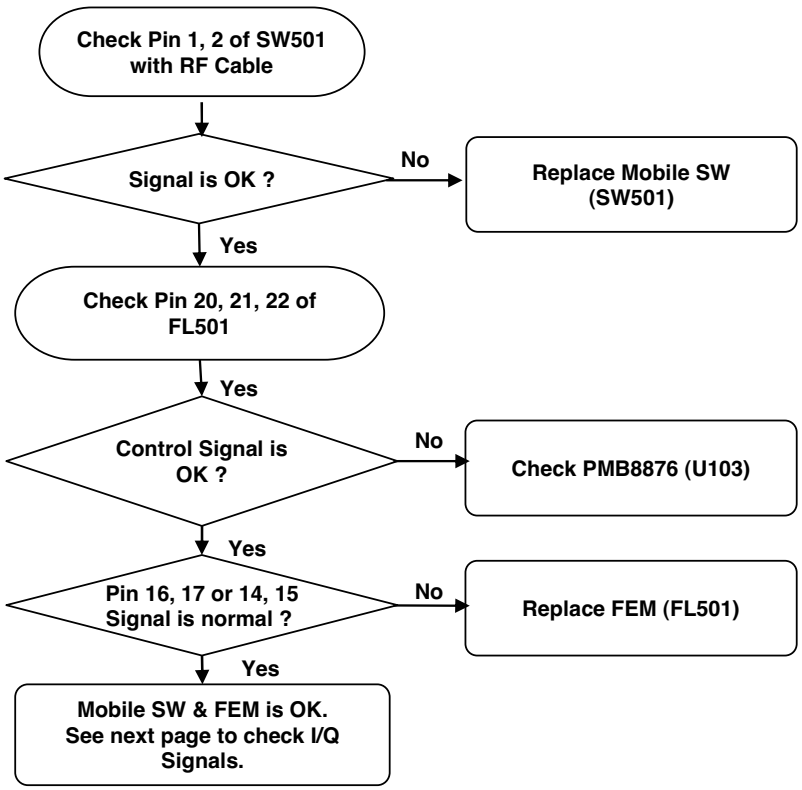


Figure 11. Mobile SW

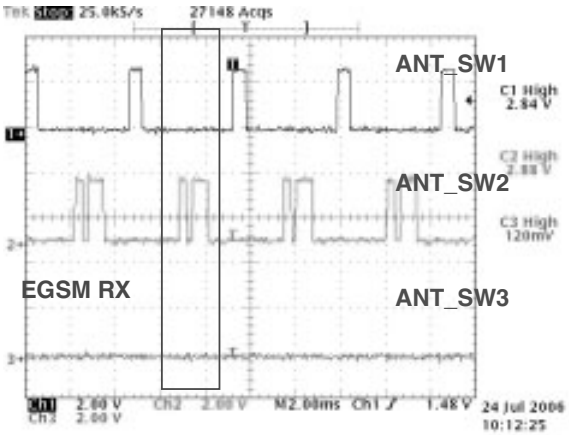


Figure 12. FEM Control Signals

4.19.6 Checking RX I/Q Signals

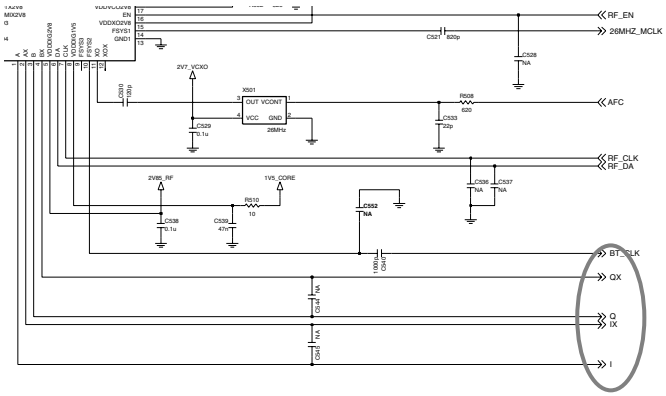
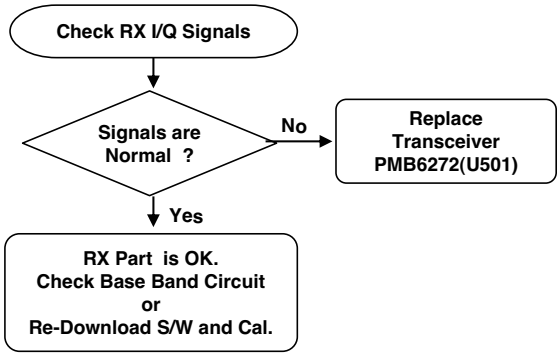


Figure 13. RX I/Q Circuit

Checking Flow



Checking Points

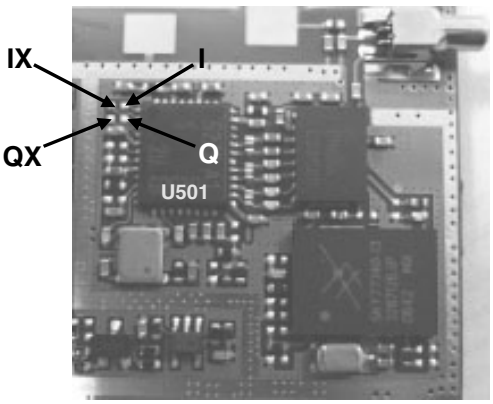


Figure 14. RX I/Q

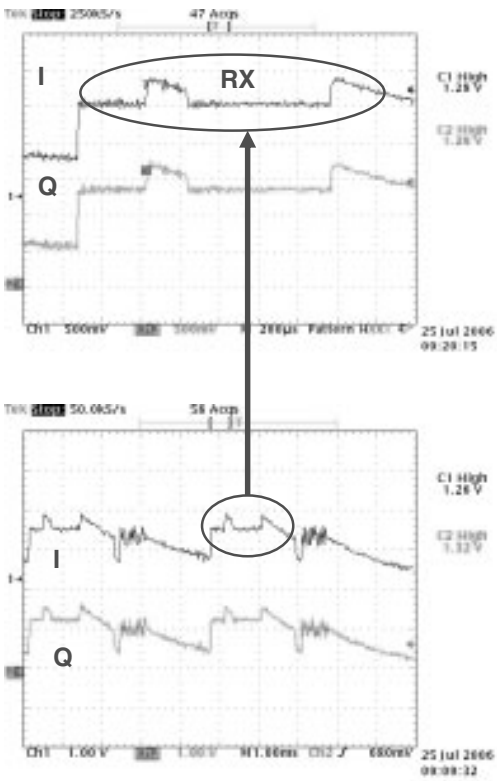
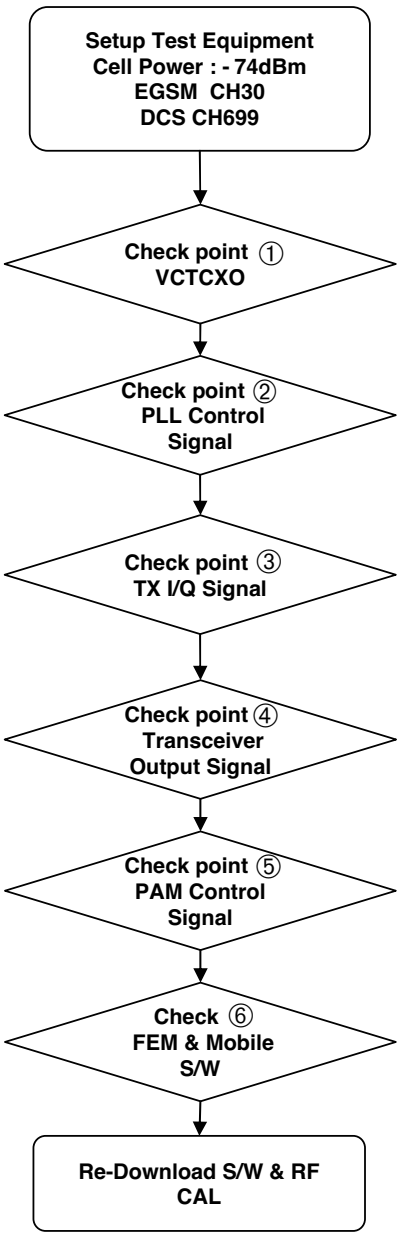


Figure 15. RX I/Q Waveform

4.19.7 Trouble Shooting of Transmitter Part

Checking Flow



Checking Points

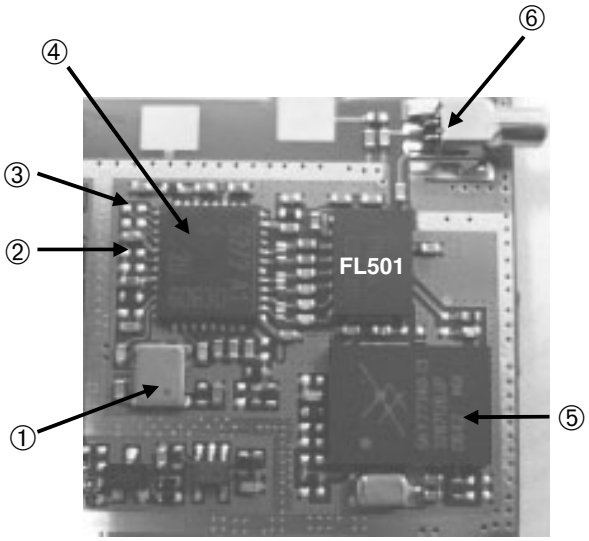


Figure 16. RF Part

4.19.8 Checking TX I/Q Signals

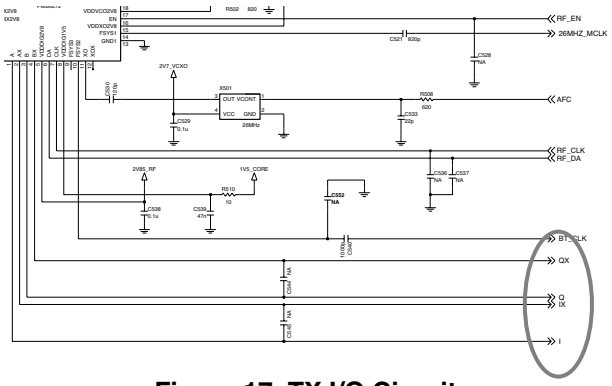
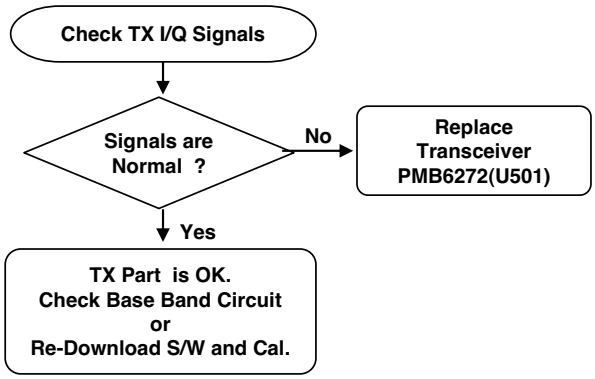


Figure 17. TX I/Q Circuit

Checking Flow



Checking Points

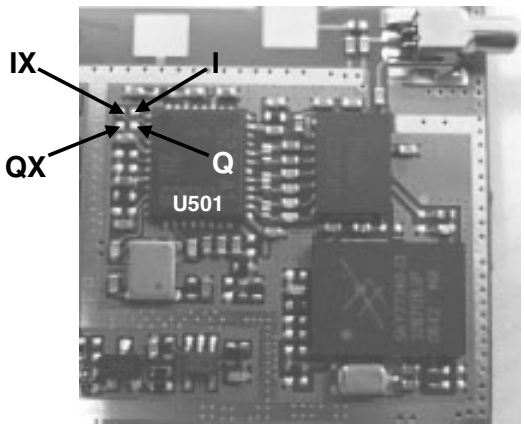


Figure 18. TX I/Q

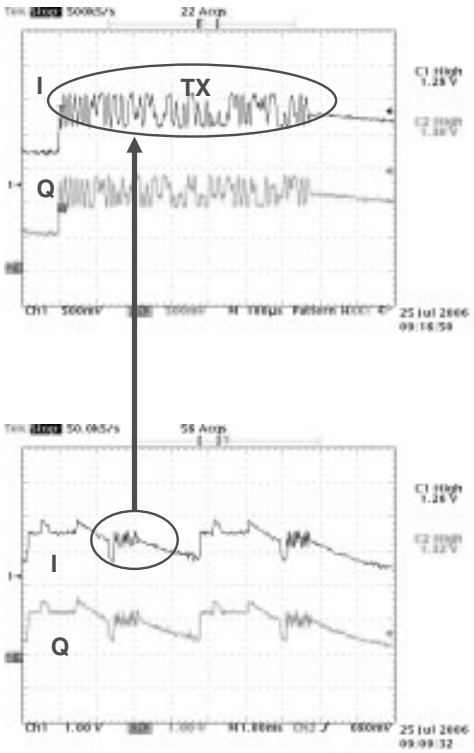


Figure 19. TX I/Q Waveform

4.19.9 Checking Transceiver Output Signals

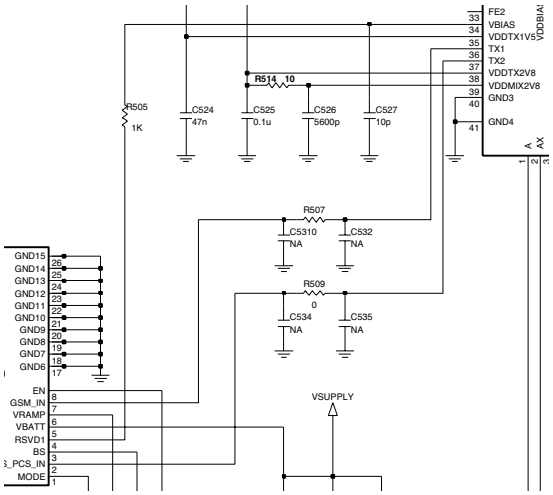


Figure 20. Transceiver Output Circuit

Checking Points

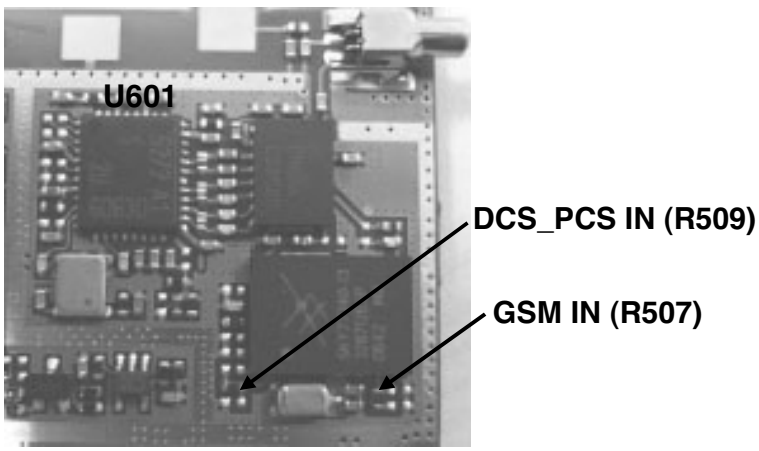
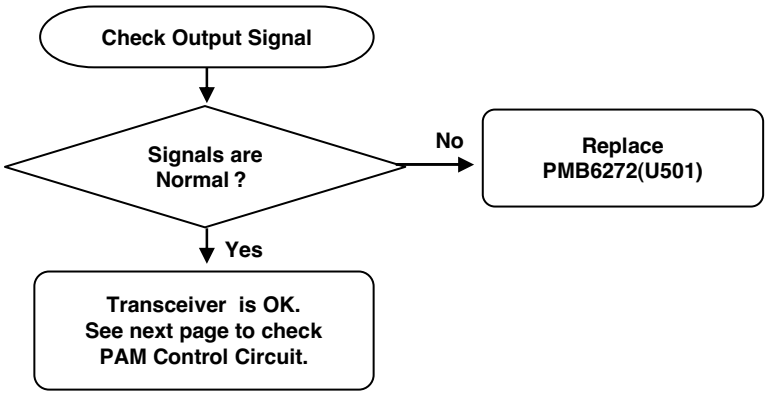


Figure 21. Transceiver Output

MODE	Transceiver Output
GSMK	VRAMP controls output power
8PSK	VRVBIAS sets PA bias

Table 3. Transceiver Output Operation

Checking Flow



GSM IN (MODE: GMSK)

Figure 22. Transceiver Output (GMSK)

GSM IN (MODE: 8PSK)

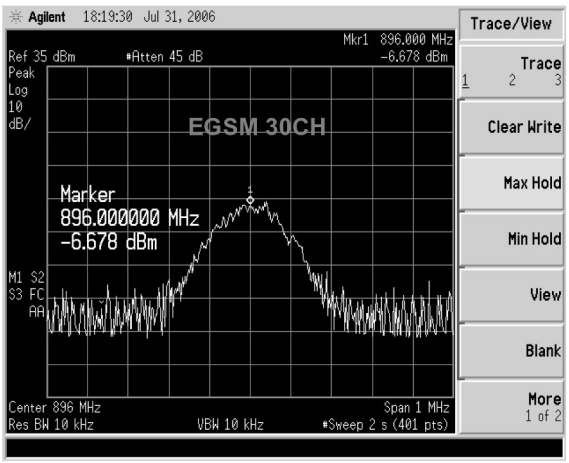


Figure 23. Transceiver Output (8PSK)

4.19.10 Checking PAM Control Signals

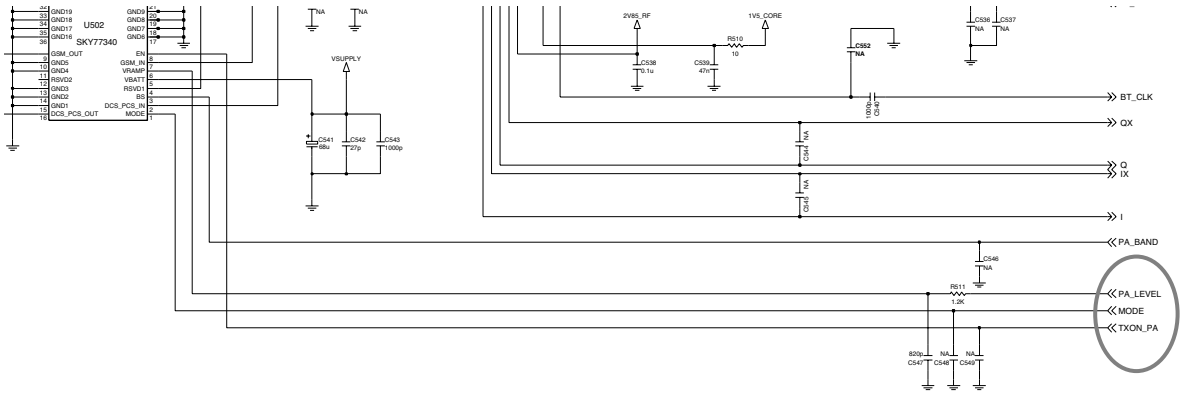


Figure 24. PAM Control Signals Circuit

Checking Points

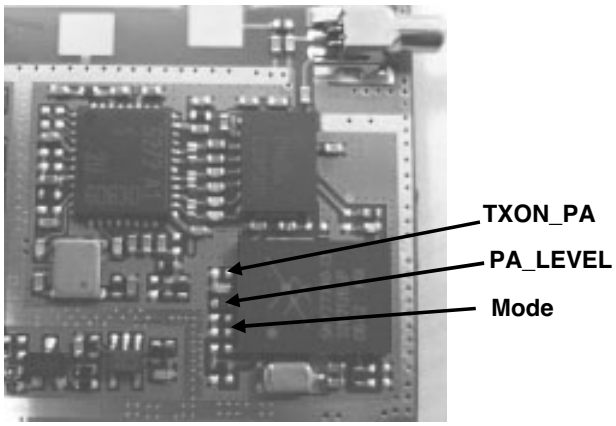
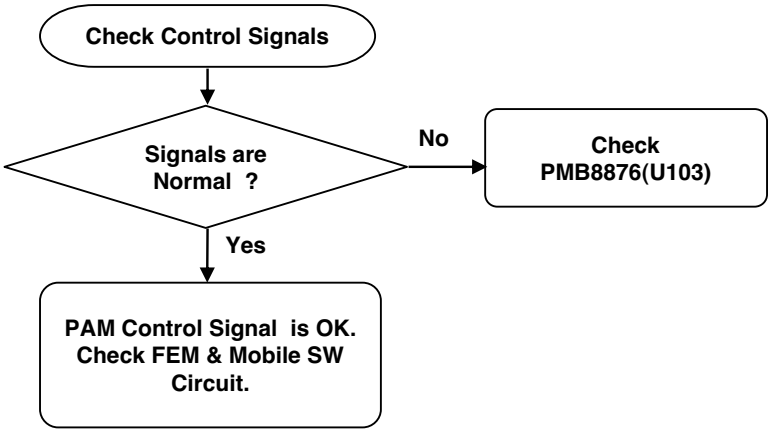


Figure 25. Transceiver Output

MODE	Mode	TXON_PA	PA_LEVEL	RSVD1 (VBIAS)
GMSK	LOW	HIGH	Active	x
8PSK	HIGH	HIGH	x	Active

Table 4. PAM Mode Operation

Checking Flow



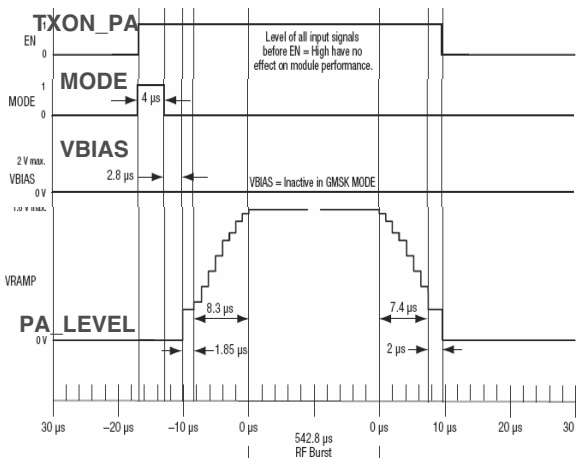


Figure 28. GSMK Control Signal

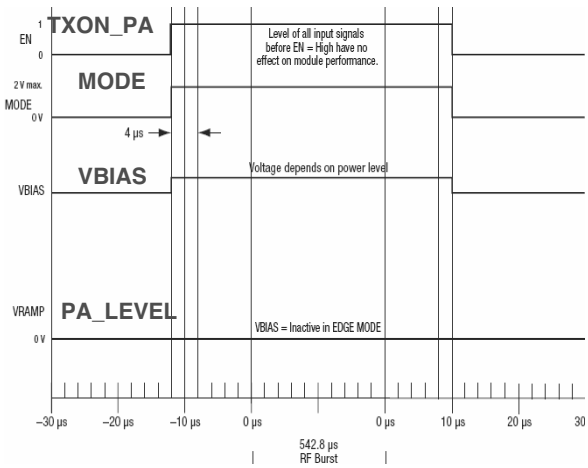
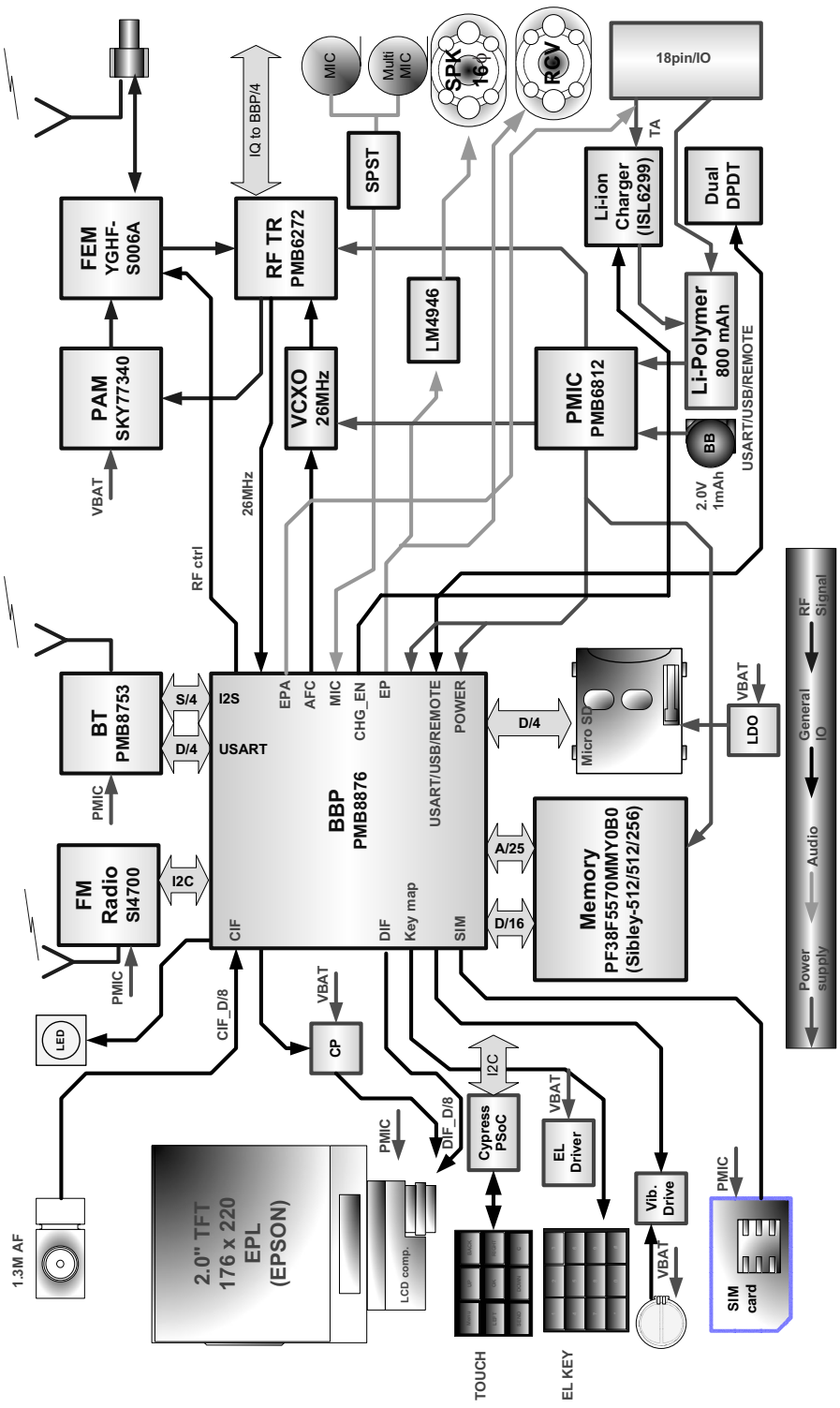


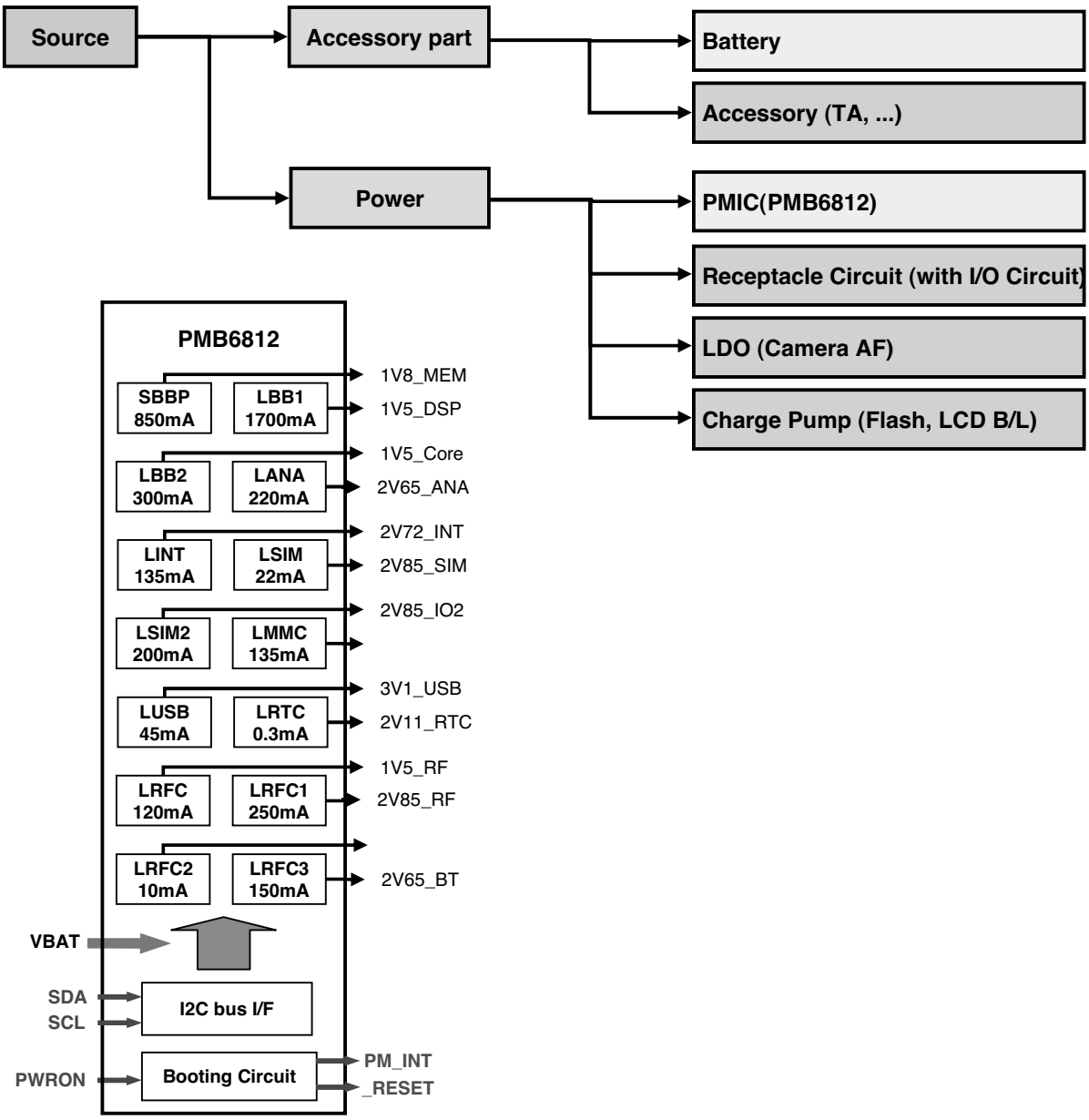
Figure 29. 8PSK Control Signal

5. Block Diagram



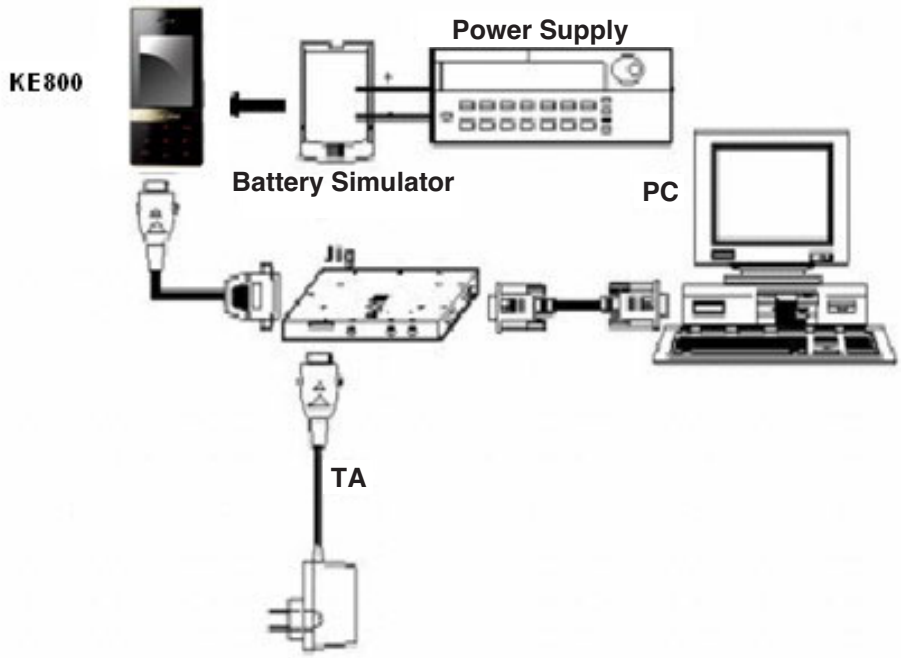
5. Block Diagram

5.1 Power Block Diagram



6. SW Download

6.1 Download setup

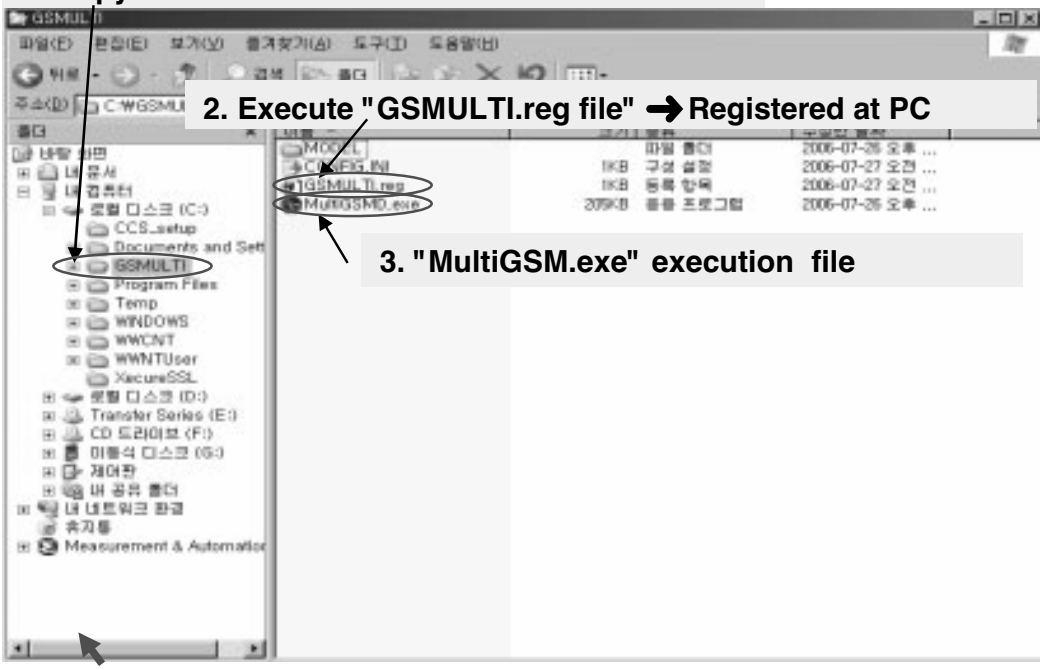


Preparation

- Target terminal
- PIF-Union
- RS-232 Cable and PIF-UNION to Phone interface Cable
- Power Supply or Battery
- IBM compatible PC supporting RS-232 with Windows 98 or newer.
- If you are going to use battery, the voltage of the battery should be over 3.7V for stable power supplying during S/W download.

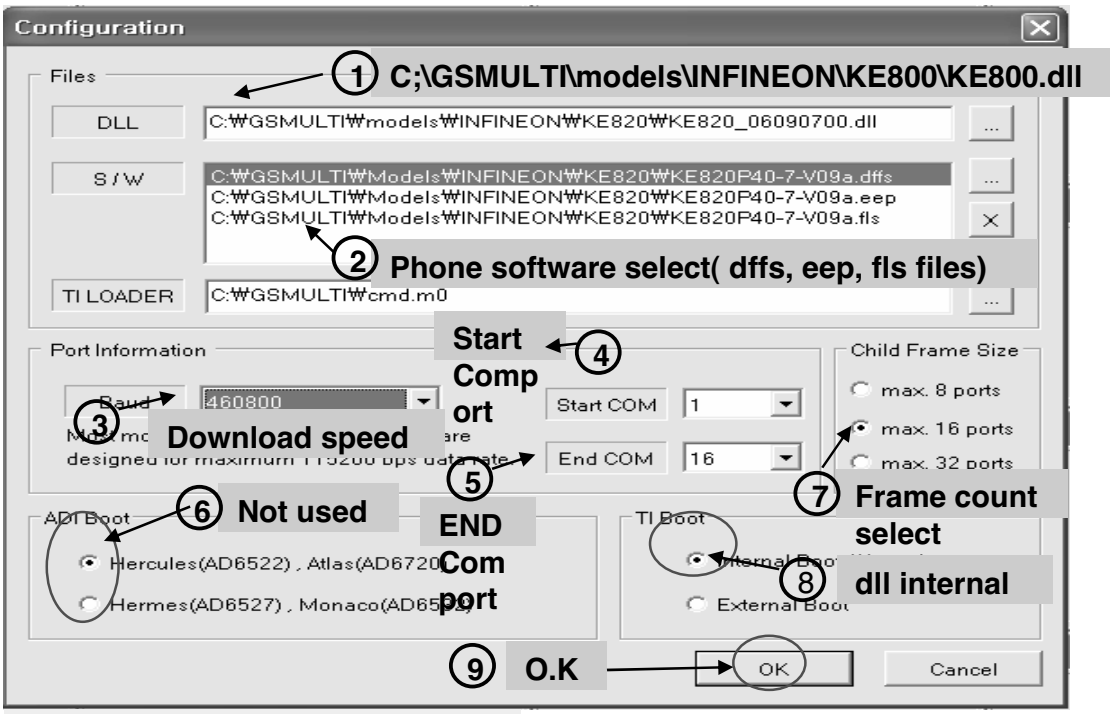
6.2 Download procedure

1. Copy "GSMULTI" Folder. Paste in " C:\"



4. Munu "Setting" ➜"Configuration"

5. Configuration : Select settings like below

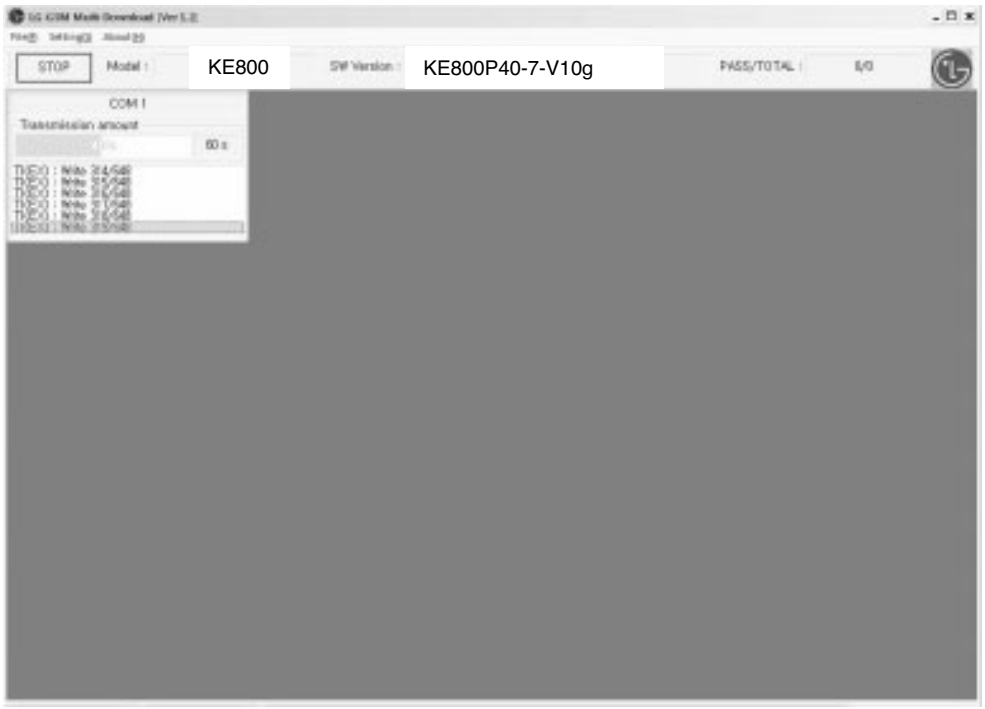


6. Press the " START" button

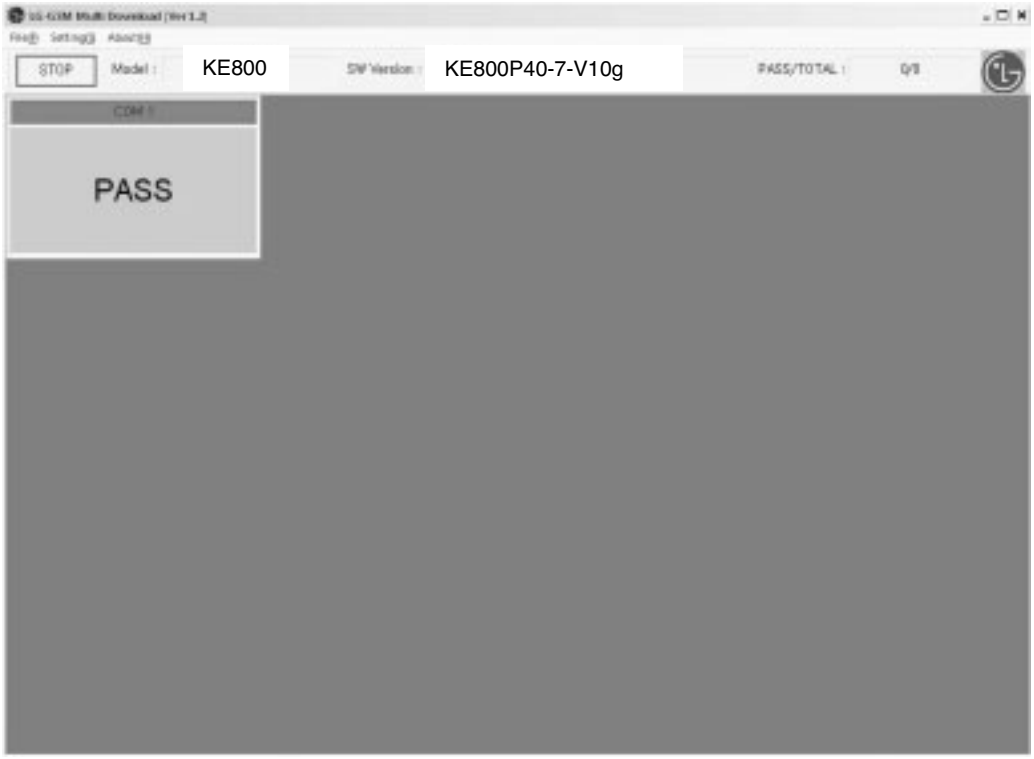
6. SW Download

7. Stand-by condition ➜ "Wait" is displayed ➜ connect the Phone

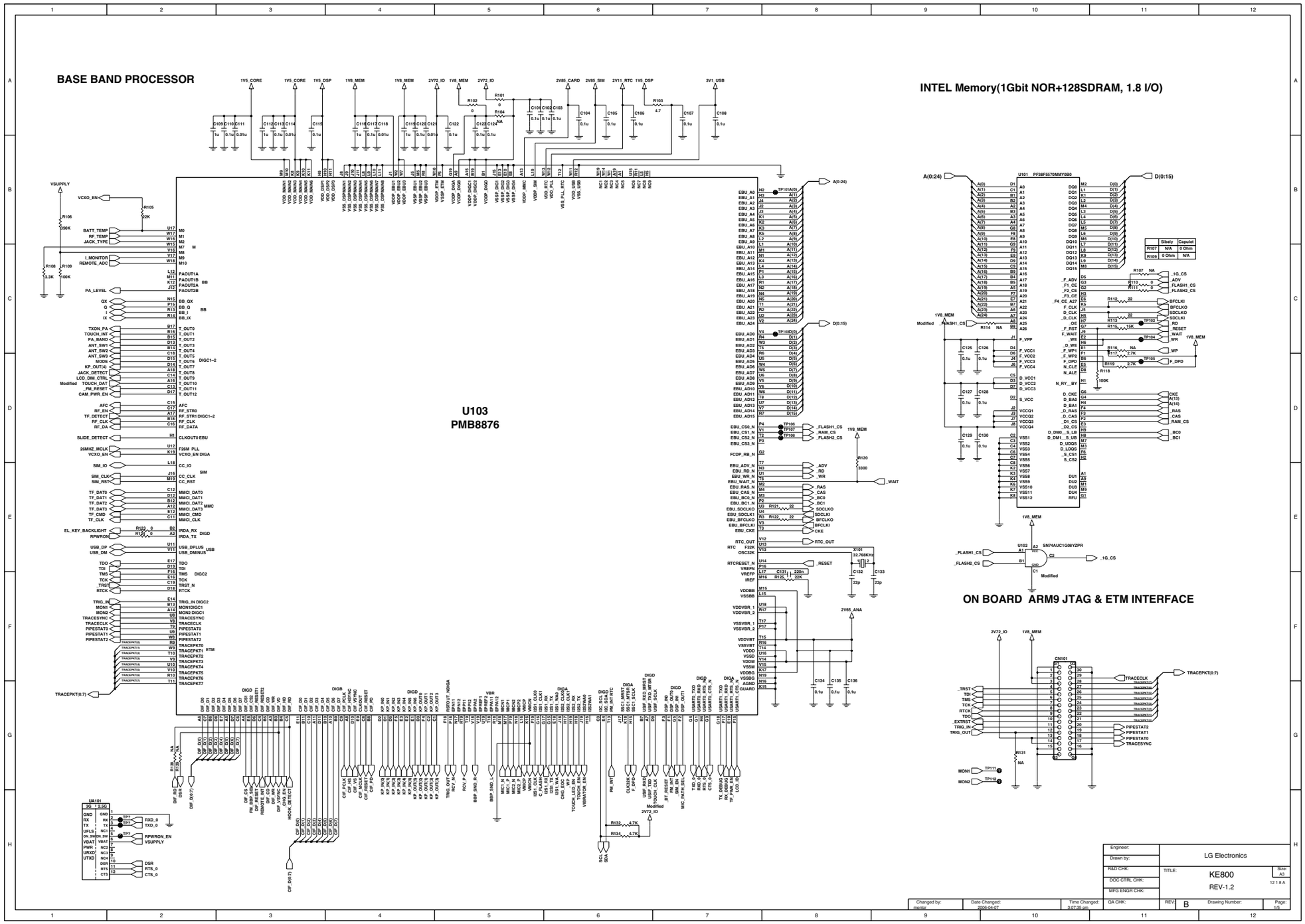
8. Download start



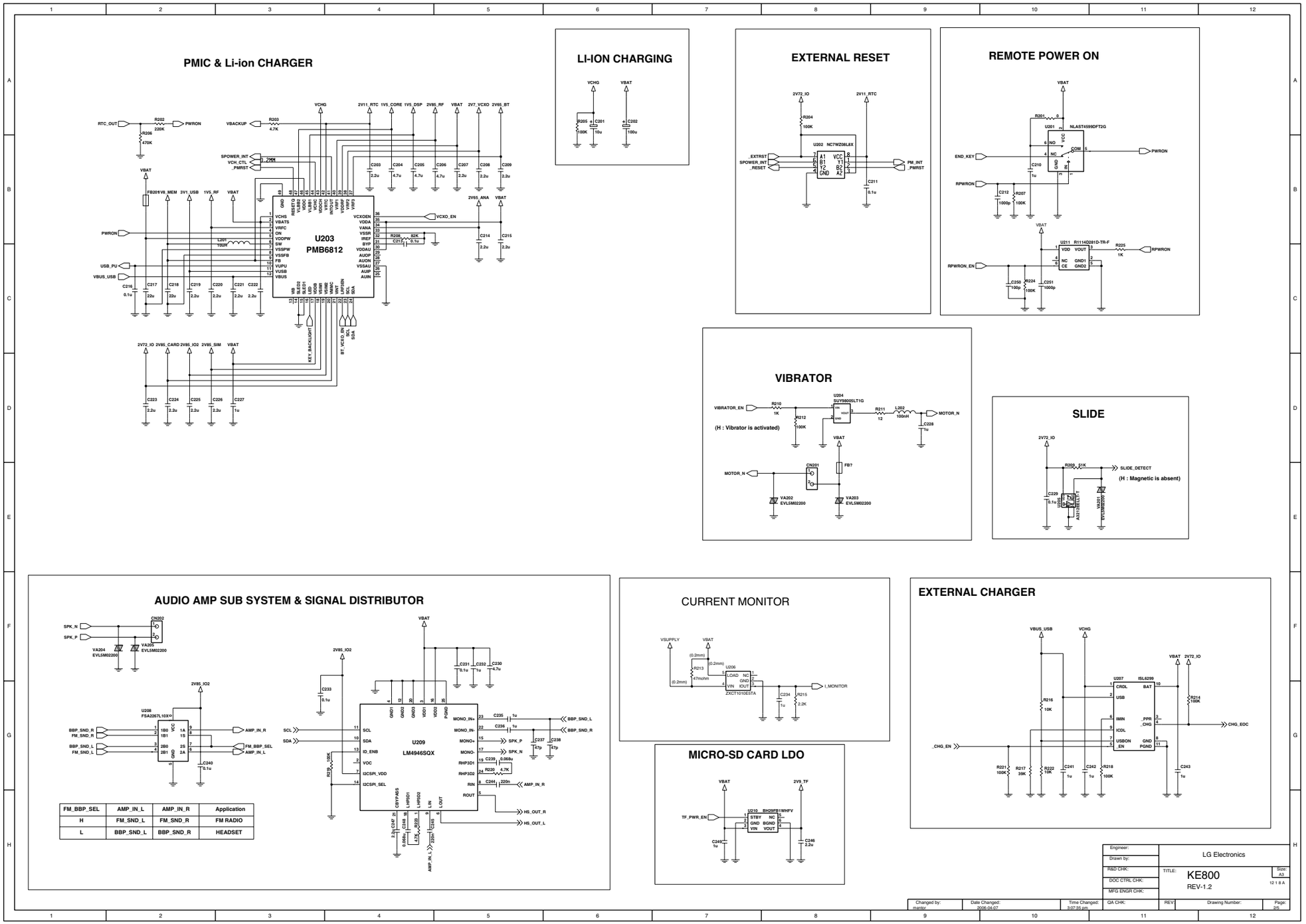
9. Download complete



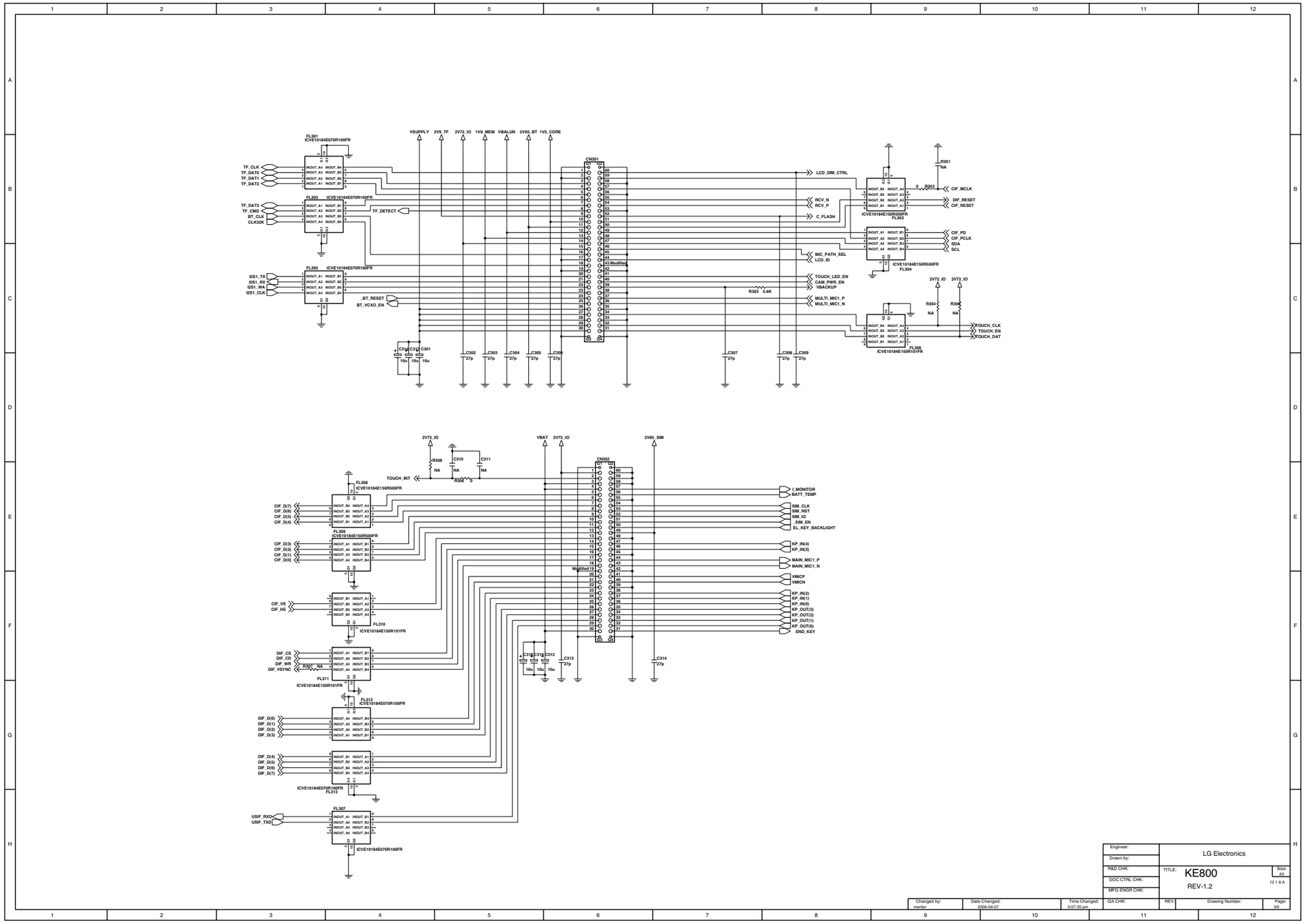
7. CIRCUIT DIAGRAM



7. CIRCUIT DIAGRAM

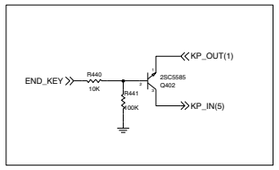


7. CIRCUIT DIAGRAM

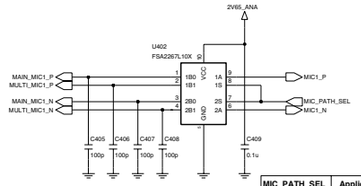


Changed by: mantor	Date Changed: 2006-04-07	Time Changed: 3:07:35 pm	Engineer:	LG Electronics	
			Drawn by:		
			R&D CHK:	TITLE: KE800 REV-1.2	Size: A3
			DOC CTRL CHK:		12 1 8 A
			MFG ENGR CHK:		
			QA CHK:	REV	Drawing Number: / Page: 3/5

7. CIRCUIT DIAGRAM

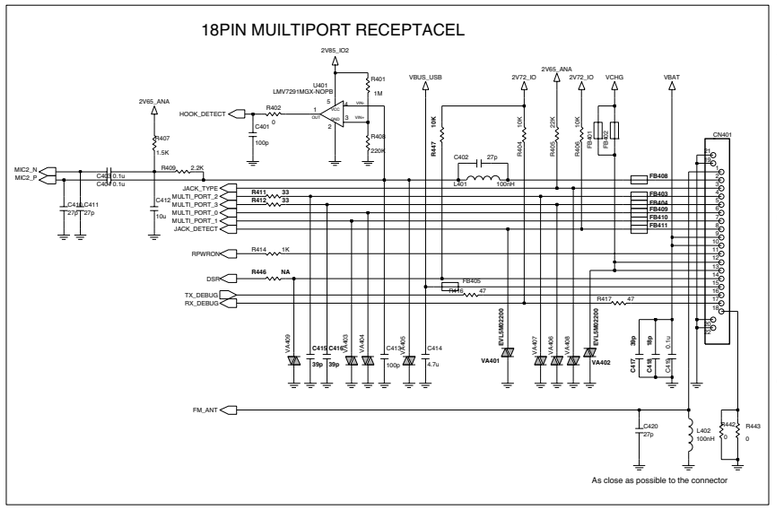


MULTI MICROPHONE SWITCH

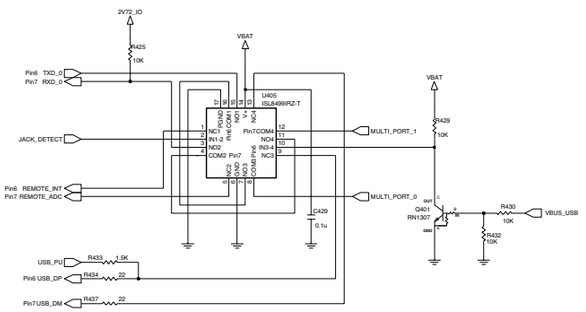


MIC_PATH_SEL	Application
H	Multi-Mic
L	Main Mic

18PIN MUILTIPORT RECEPTACEL

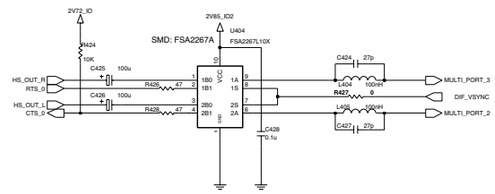


MULTI-PORT SWITCH 1



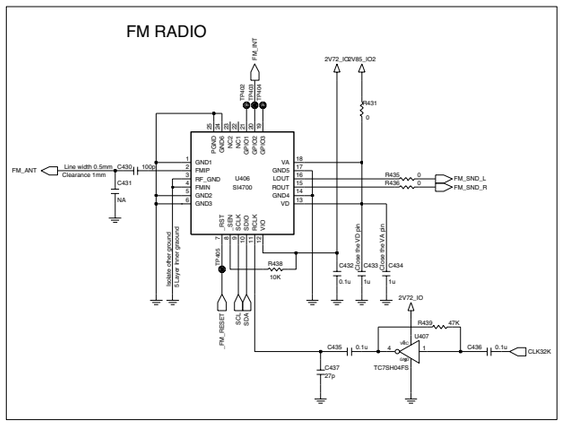
IN3-4(USB : L)	IN1-2(JACK : L)	Pin6	Pin7	Application
L	Donit Care	USB_DP	USB_DM	USB
H	H	TXD_0	RXD_0	UART
	L	REMOTE_INT	REMOTE_ADC	HEADSET

MULTI-PORT SWITCH 2



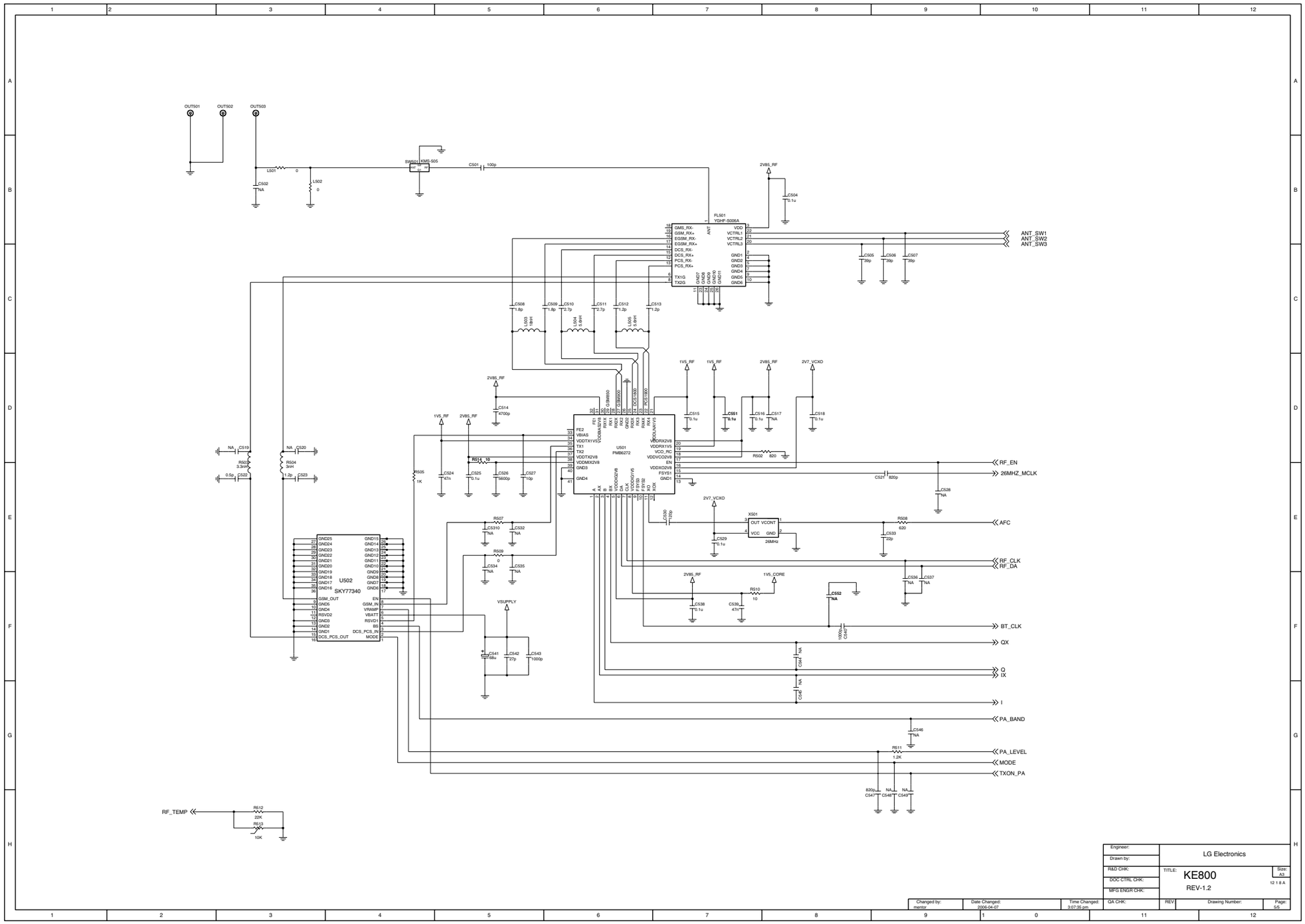
DIF_VSYNC	MULTI_PORT_3	MULTI_PORT_2	Application
H	RTS_0	CTS_0	Debug
L	HS_OUT_R	HS_OUT_L	HEADSET

FM RADIO

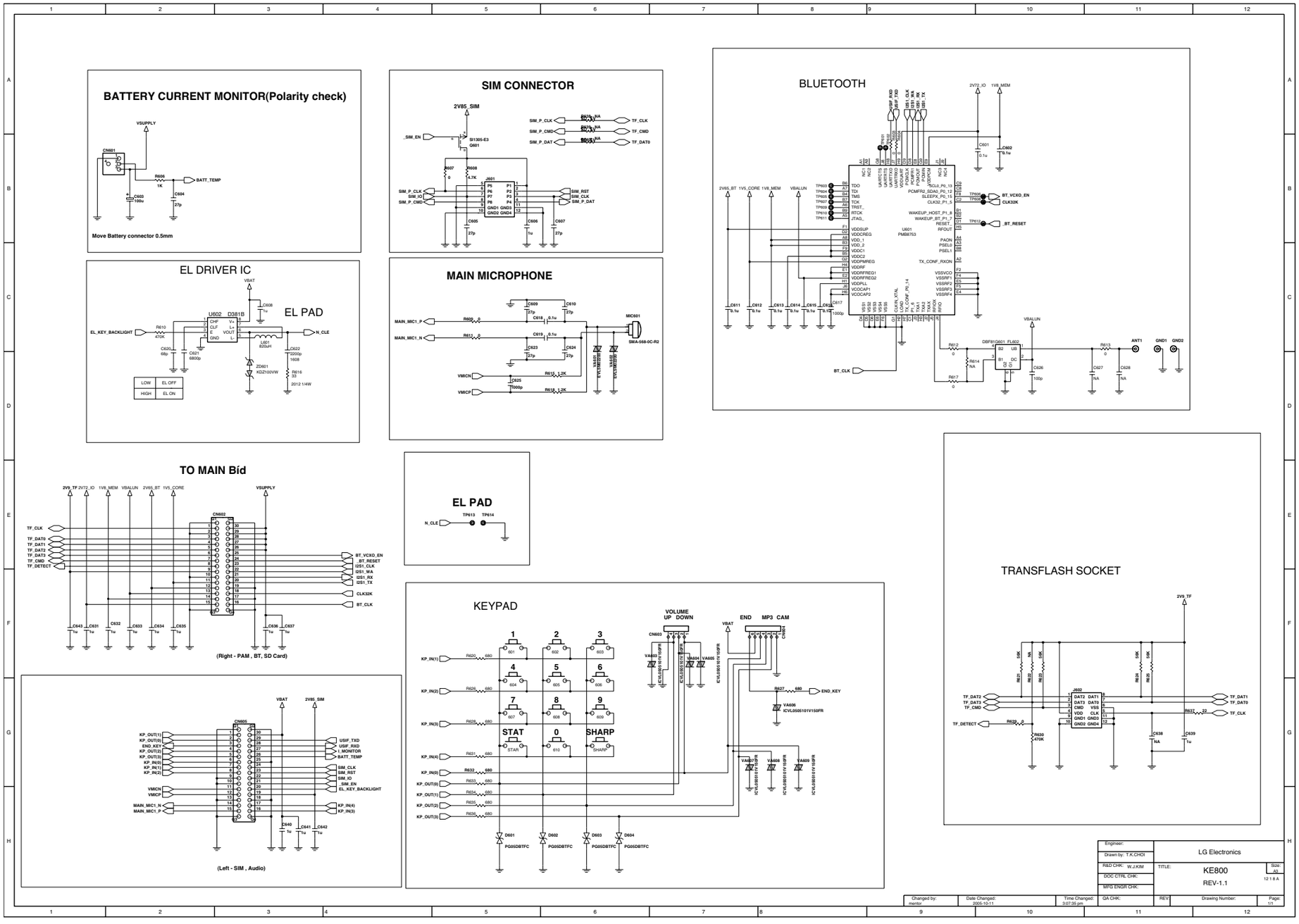


Engineer:	LG Electronics	
Drawn by:		
R&D CHK:	TITLE: KE800 REV-1.2	Size: A3
DOC CTRL CHK:		12.1.8 A
MFG ENGR CHK:		
Changed by: mentor	Date Changed: 2006-04-07	Time Changed: 5:31:08 pm
QA CHK:	REV: B	Drawing Number: Page: 4/5

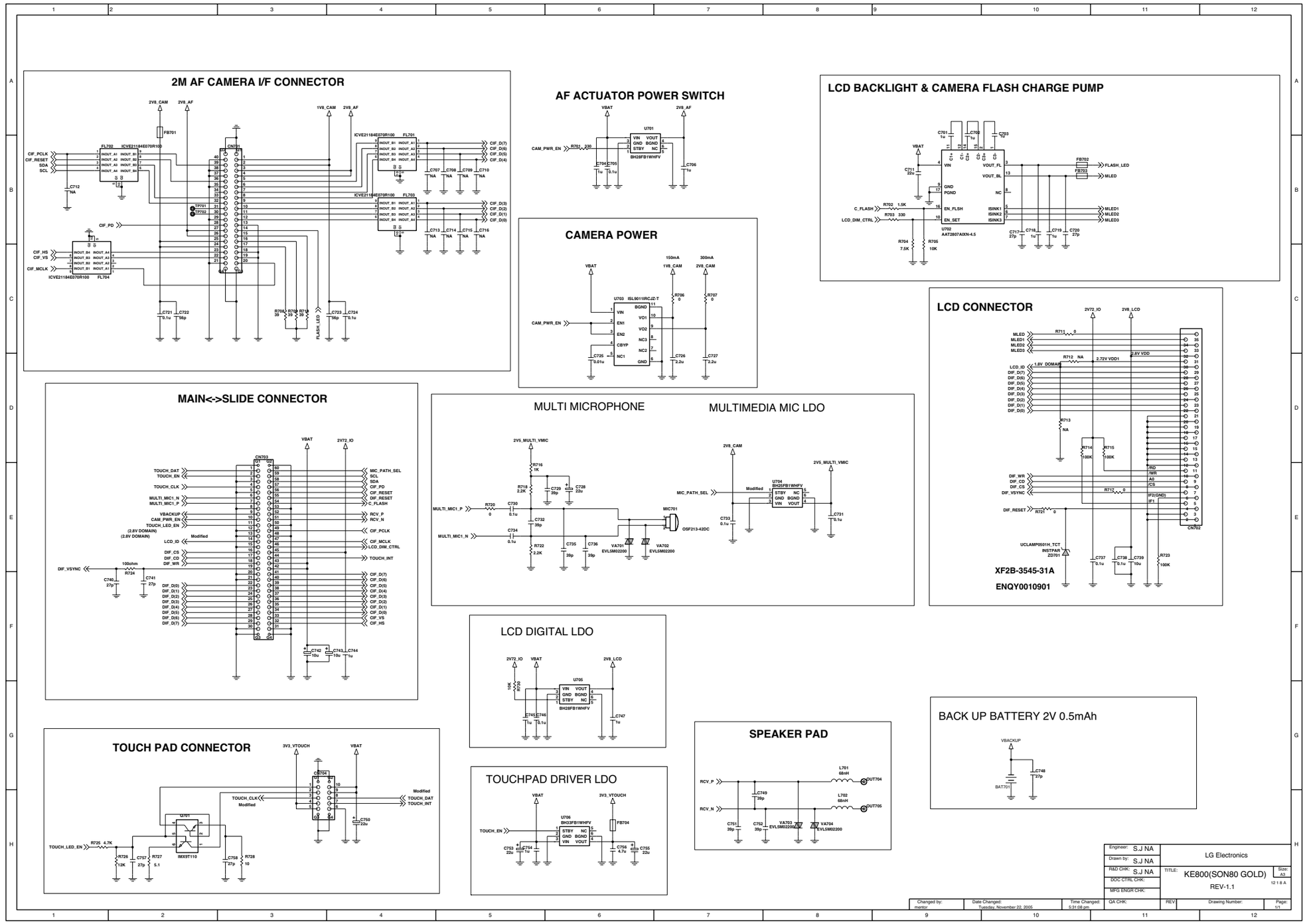
7. CIRCUIT DIAGRAM



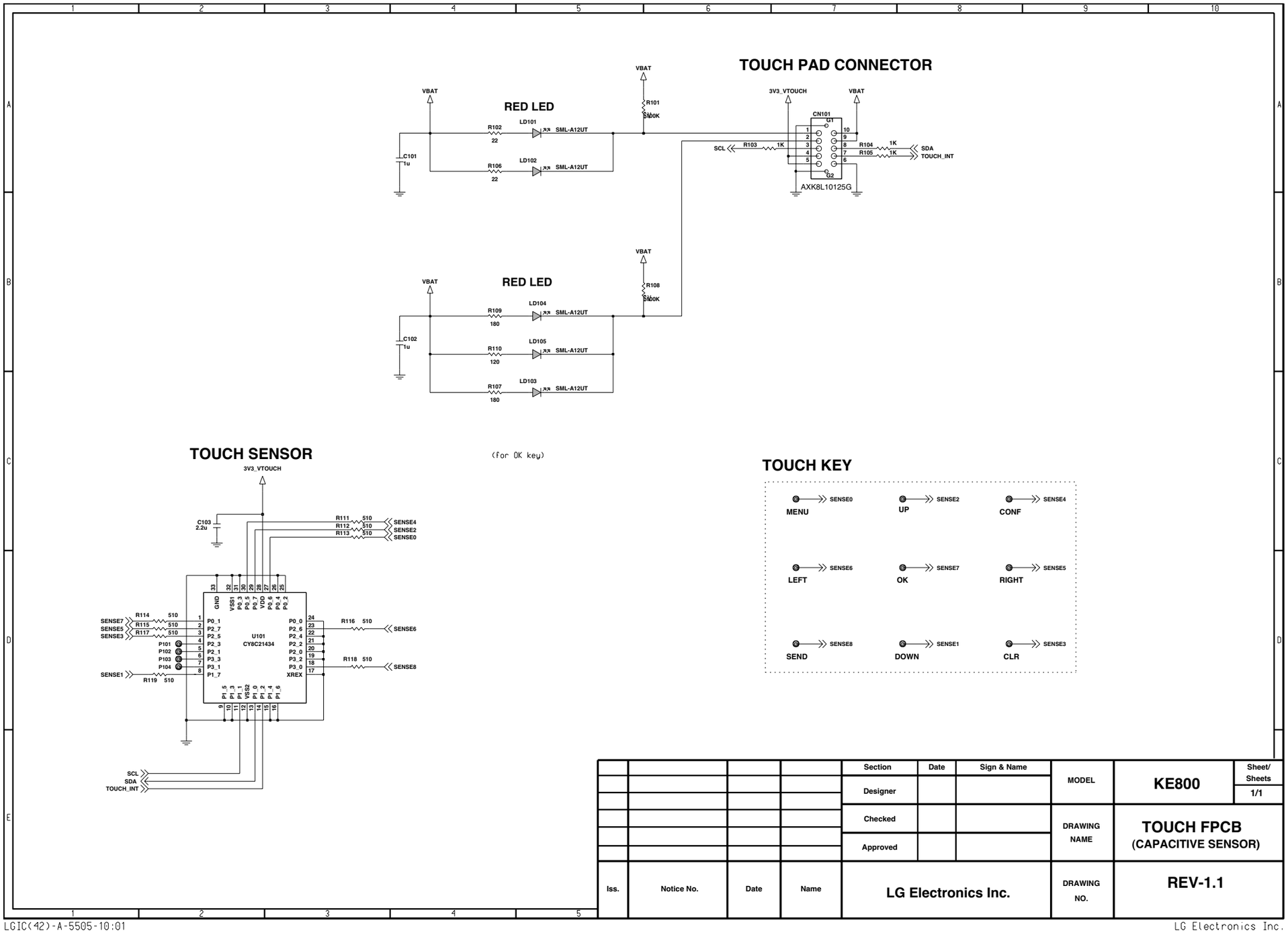
7. Circuit Diagram



7. Circuit Diagram



7. CIRCUIT DIAGRAM

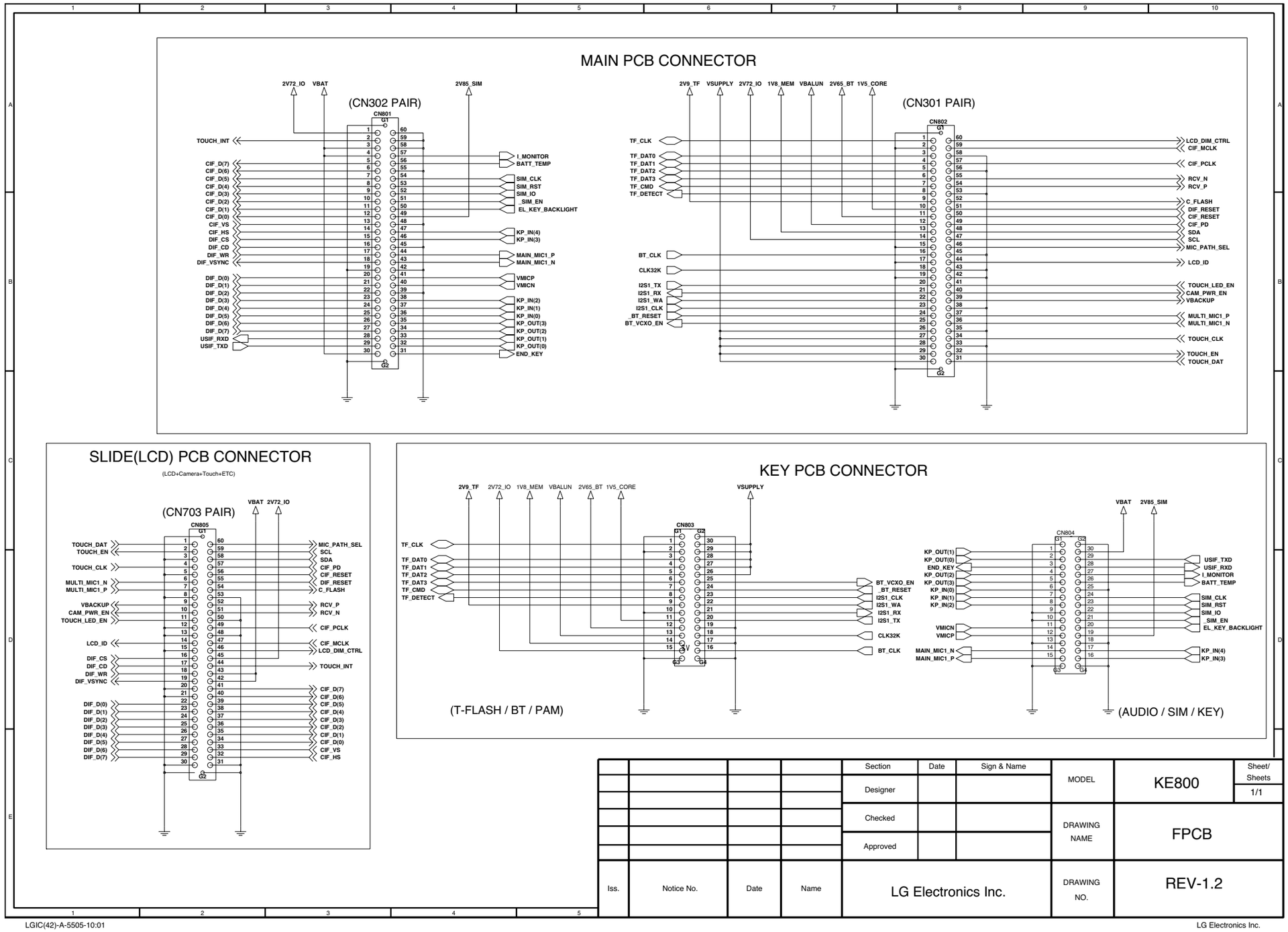


				Section	Date	Sign & Name	MODEL	KE800	Sheet/ Sheets
				Designer					1/1
				Checked			DRAWING NAME	TOUCH FPCB (CAPACITIVE SENSOR)	
				Approved					
Iss.	Notice No.	Date	Name	LG Electronics Inc.			DRAWING NO.	REV-1.1	

LGIC(42)-A-5505-10:01

LG Electronics Inc.

7. CIRCUIT DIAGRAM

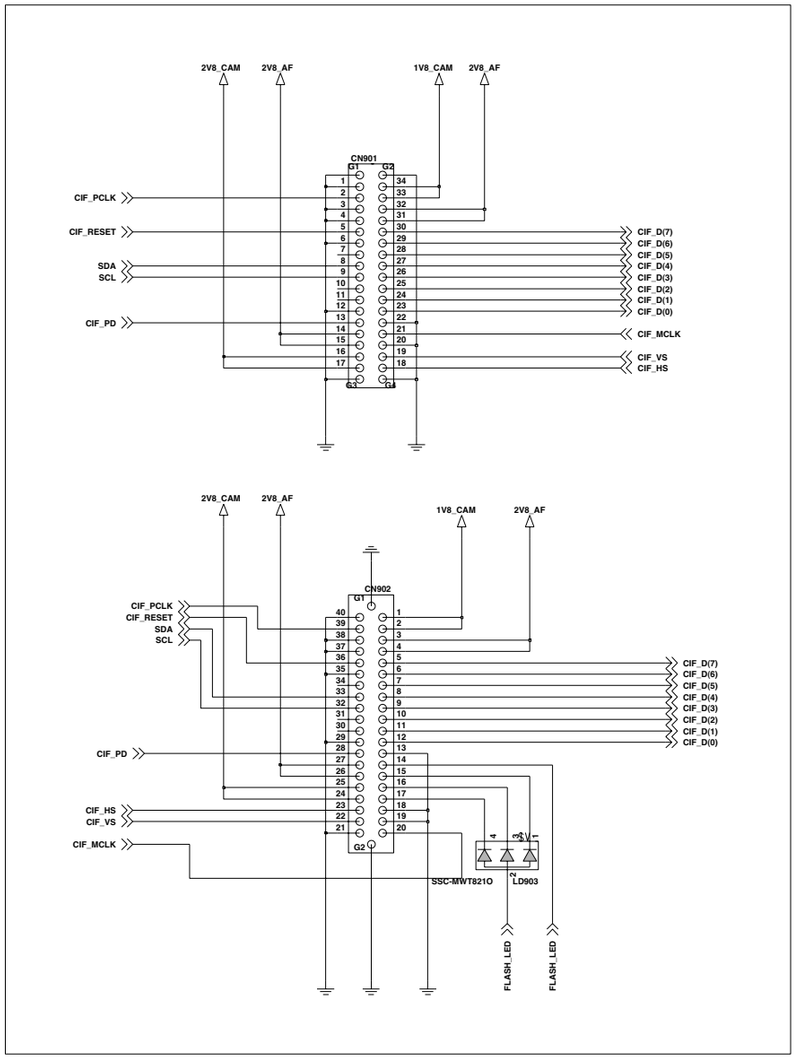


				Section	Date	Sign & Name	MODEL	KE800	Sheet/ Sheets
				Designer					1/1
				Checked			DRAWING NAME	FPCB	
				Approved					
Iss.	Notice No.	Date	Name	LG Electronics Inc.			DRAWING NO.	REV-1.2	

LGIC(42)-A-5505-10:01

LG Electronics Inc.

7. CIRCUIT DIAGRAM



				Section	Date	Sign & Name	MODEL	KE800	Sheet/ Sheets
				Designer					1/1
				Checked			DRAWING NAME	SLIDE_CAM_FPCB	
				Approved					
Iss.	Notice No.	Date	Name	LG Electronics Inc.			DRAWING NO.	REV-1.1	

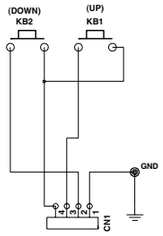
LGIC(42)-A-5505-10:01

LG Electronics Inc.

LGMC

7. CIRCUIT DIAGRAM

VOLUME SIDEKREY



4	KP_IN(0)
3	KP_OUT(0) (UP)
2	KP_OUT(1) (DOWN)
1	GND

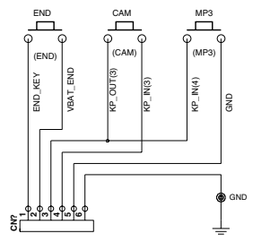
				Section	Date	Sign & Name	MODEL	KE800	Sheet/ Sheets
				Designer					1/1
				Checked			DRAWING NAME	SIDEKEY_FPCB (VOLUME)	
				Approved					
Iss.	Notice No.	Date	Name	LG Electronics Inc.			DRAWING NO.	REV-1.0	

LGIC(42)-A-5505-10:01

LG Electronics Inc.

7. CIRCUIT DIAGRAM

MP3_POWERKEY



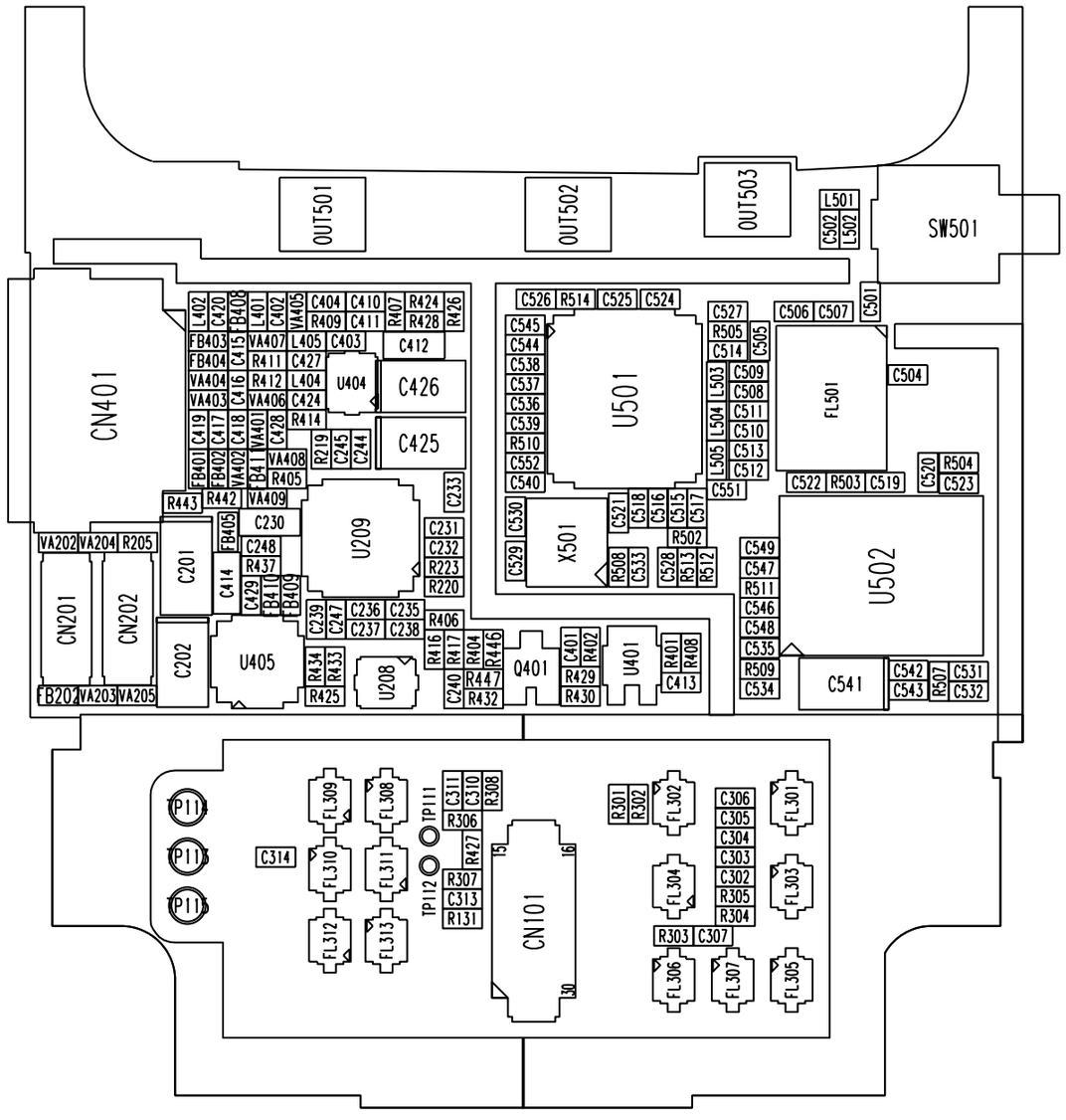
1	GND
2	KP_IN(4)
3	KP_IN(3)
4	KP_OUT(3)
5	VBAT
6	END_KEY

Iss.	Notice No.	Date	Name	Section	Date	Sign & Name	MODEL	KE800	Sheet/ Sheets
				Designer					1/1
				Checked			DRAWING NAME	SIDEKEY_FPCB (MP3 , CAM , END)	
				Approved					
				LG Electronics Inc.			DRAWING NO.	REV-1.0	

LGIC(42)-A-5505-10:01

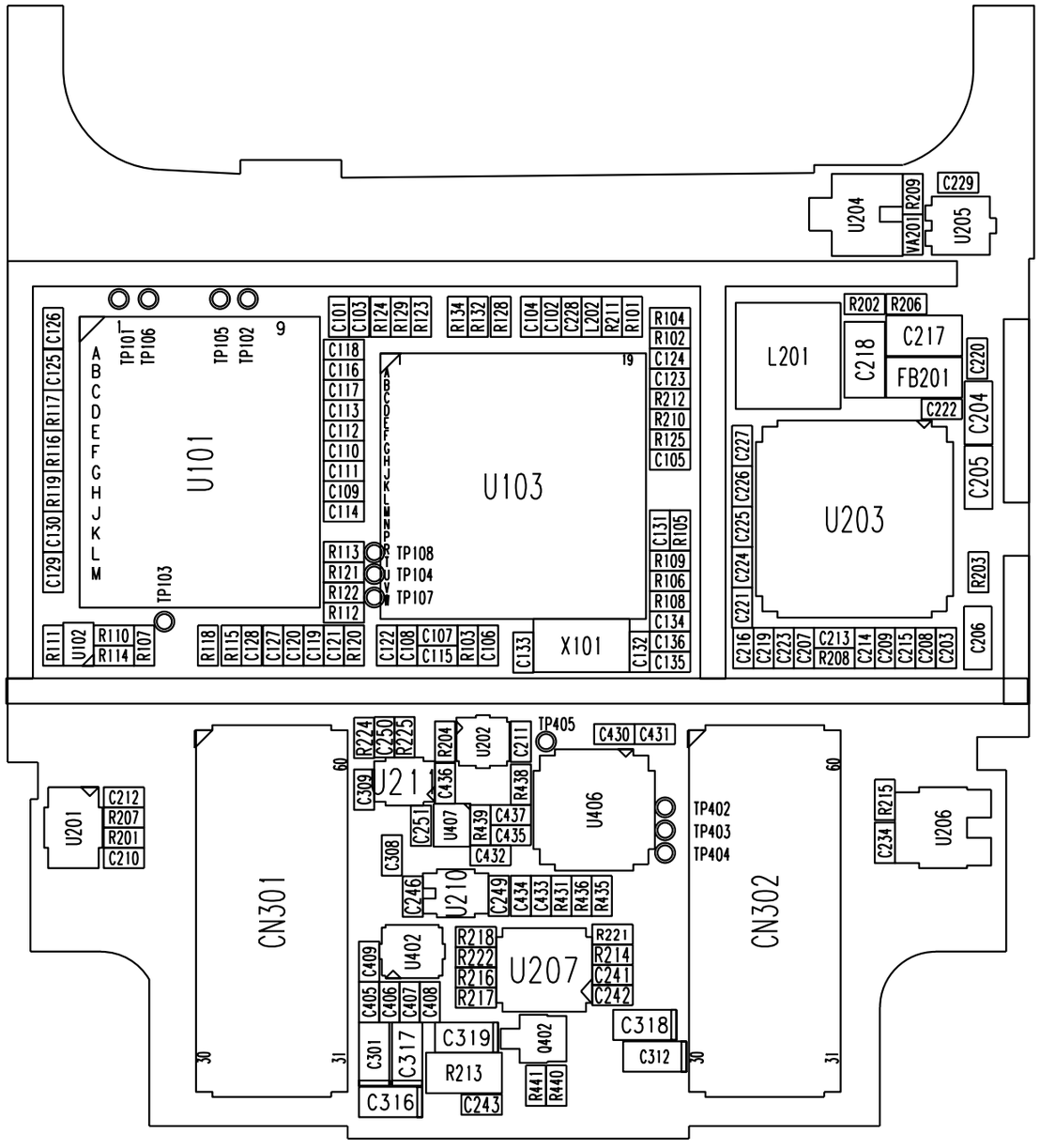
LG Electronics Inc.

8. PCB LAYOUT



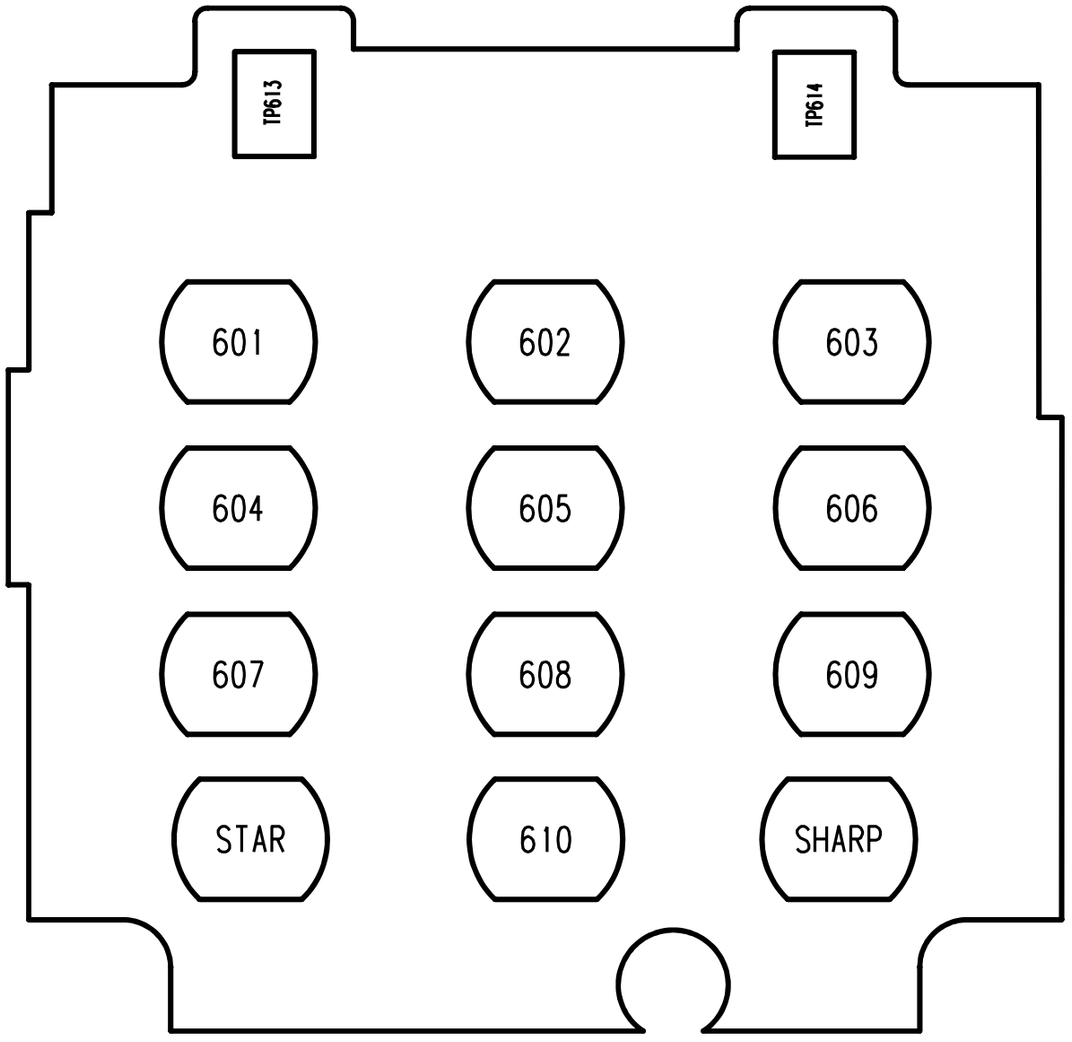
KE800-SPFY0133001-1.2-TOP

8. PCB LAYOUT



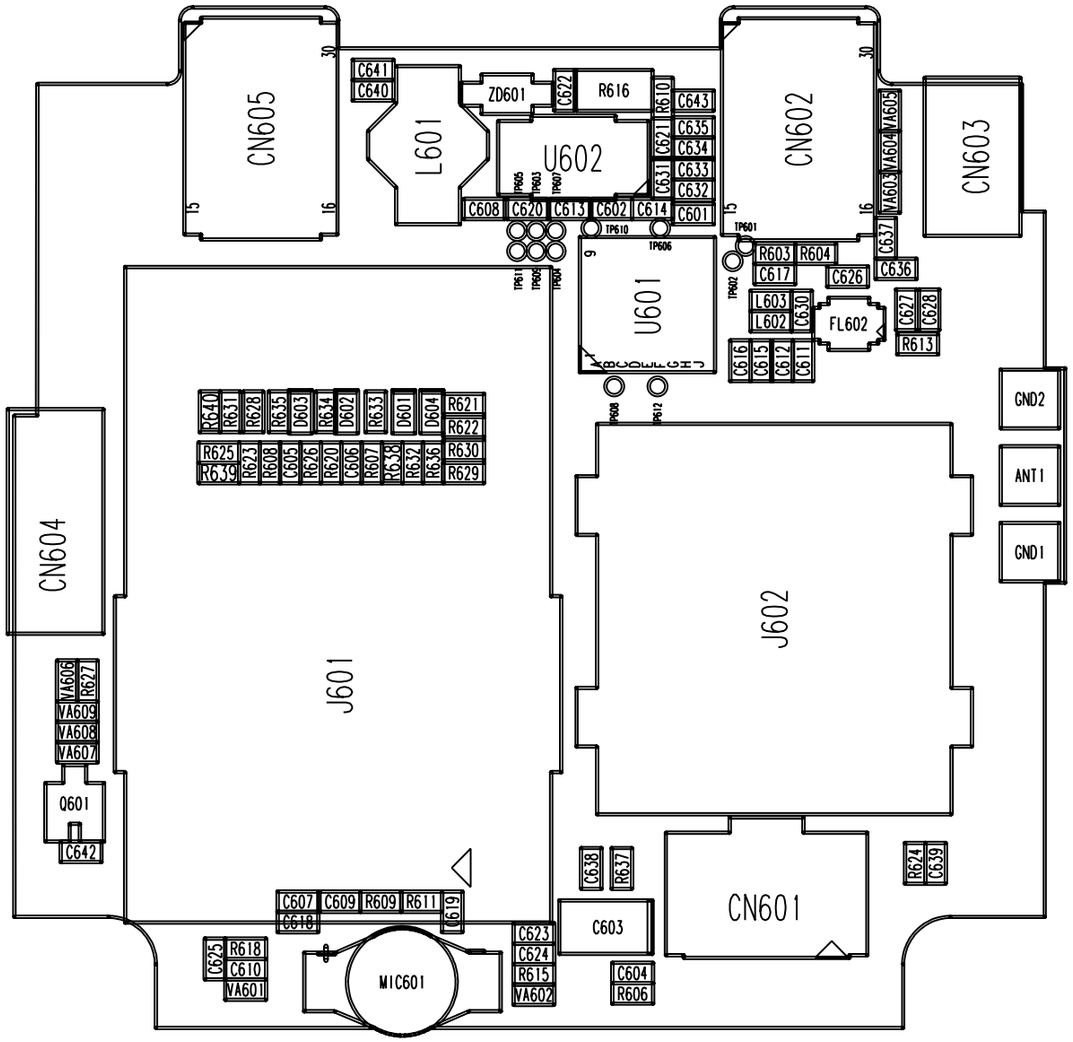
KE800-SPFY0133001-1.2-BTM

8. PCB LAYOUT



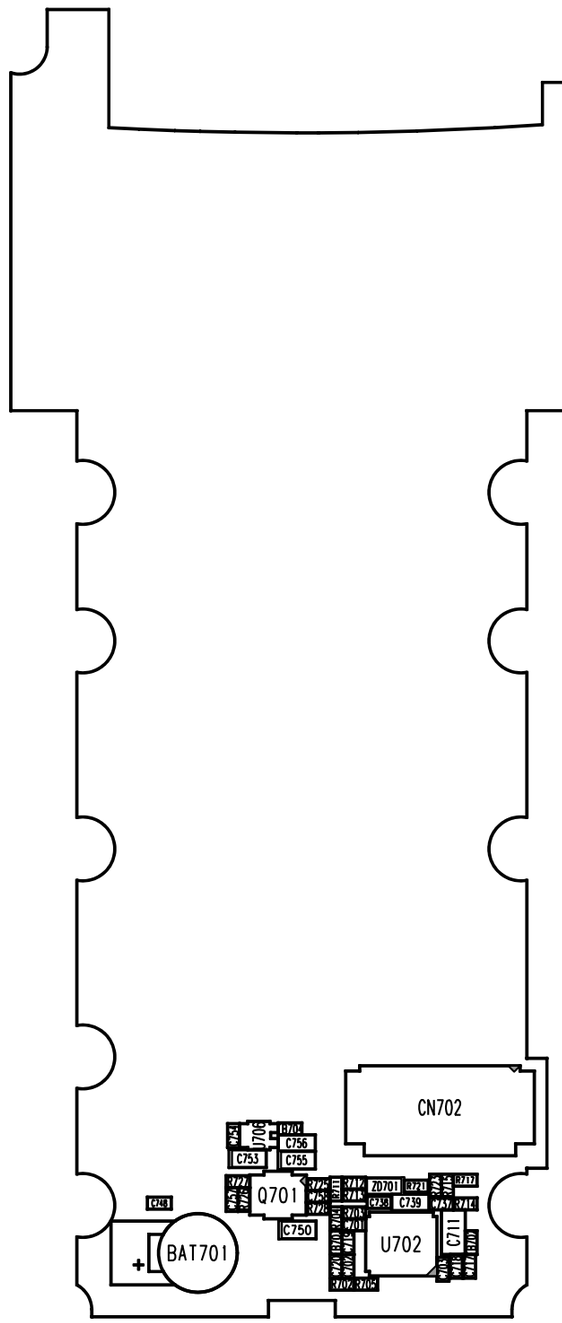
KE800-KEY-1.1

8. PCB LAYOUT



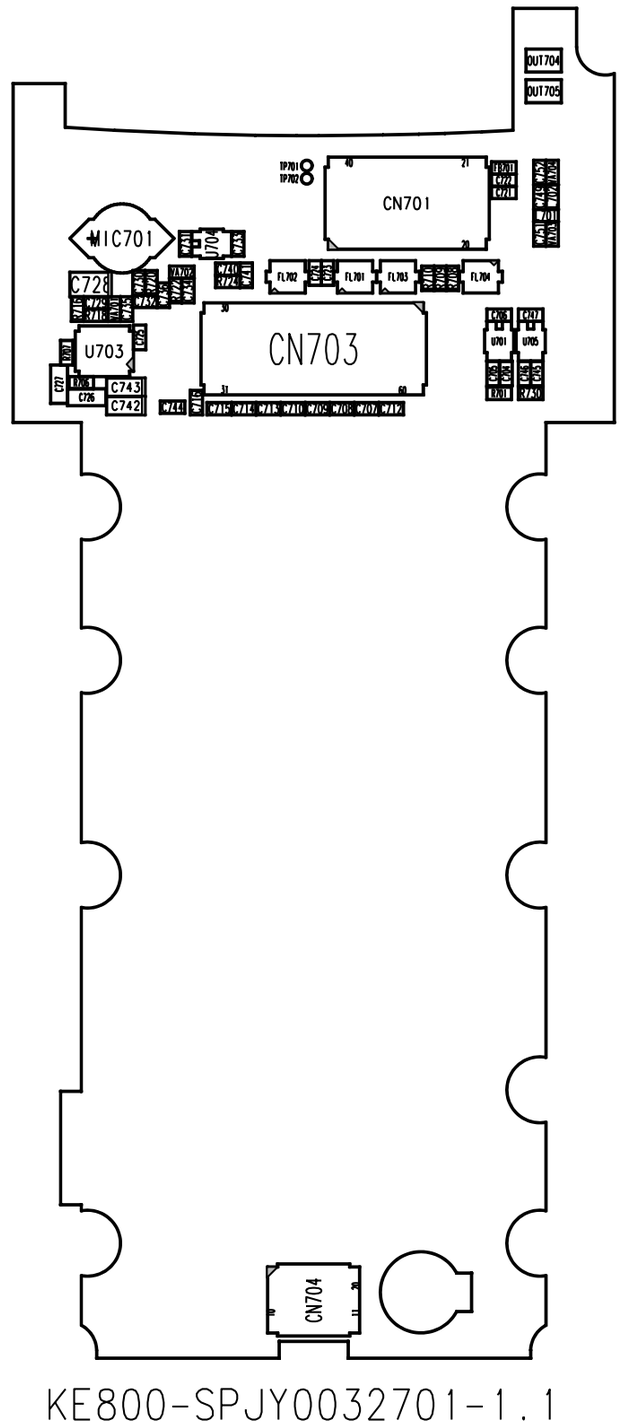
KE800-KEY-1.1

8. PCB LAYOUT



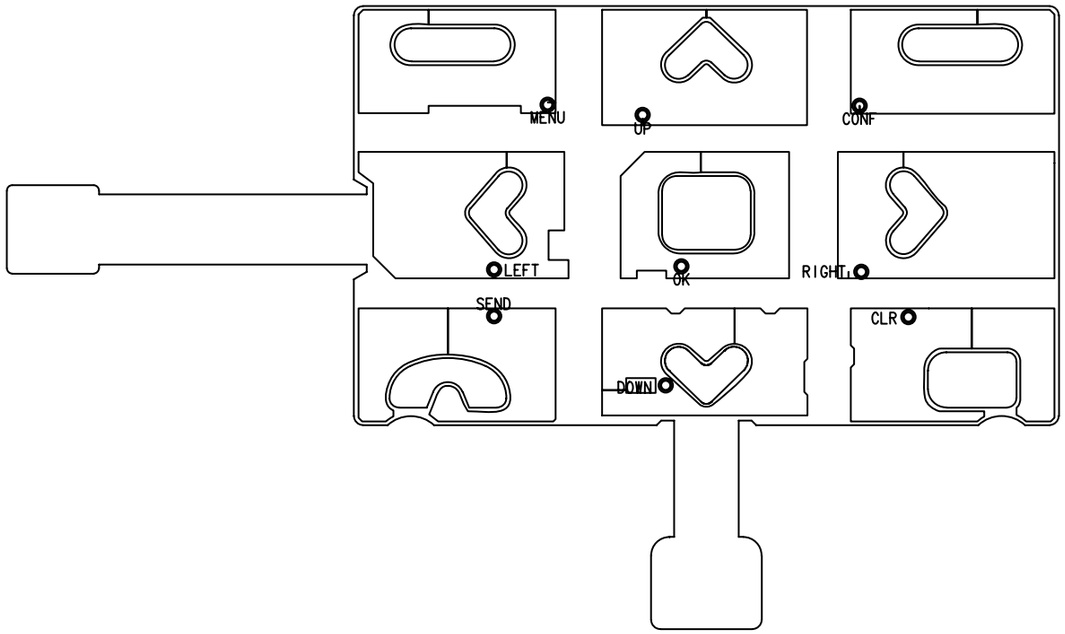
KE800-SPJY0032701-1.1

8. PCB LAYOUT



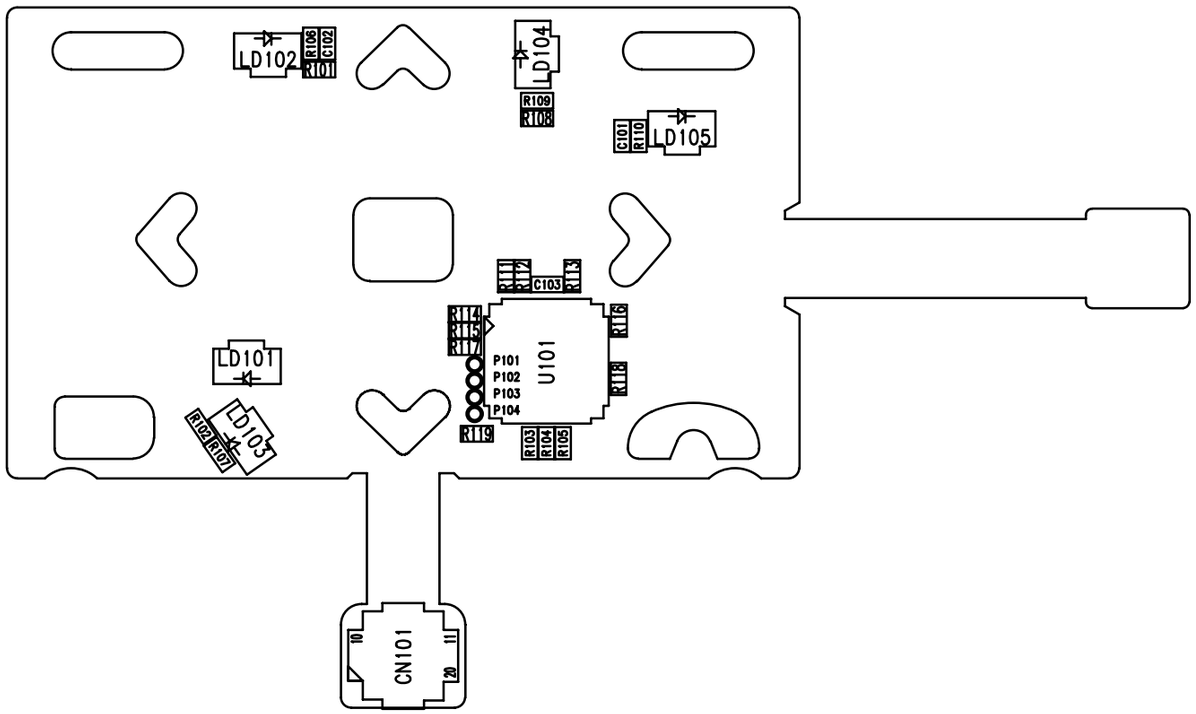
KE800-SPJY0032701-1.1

8. PCB LAYOUT



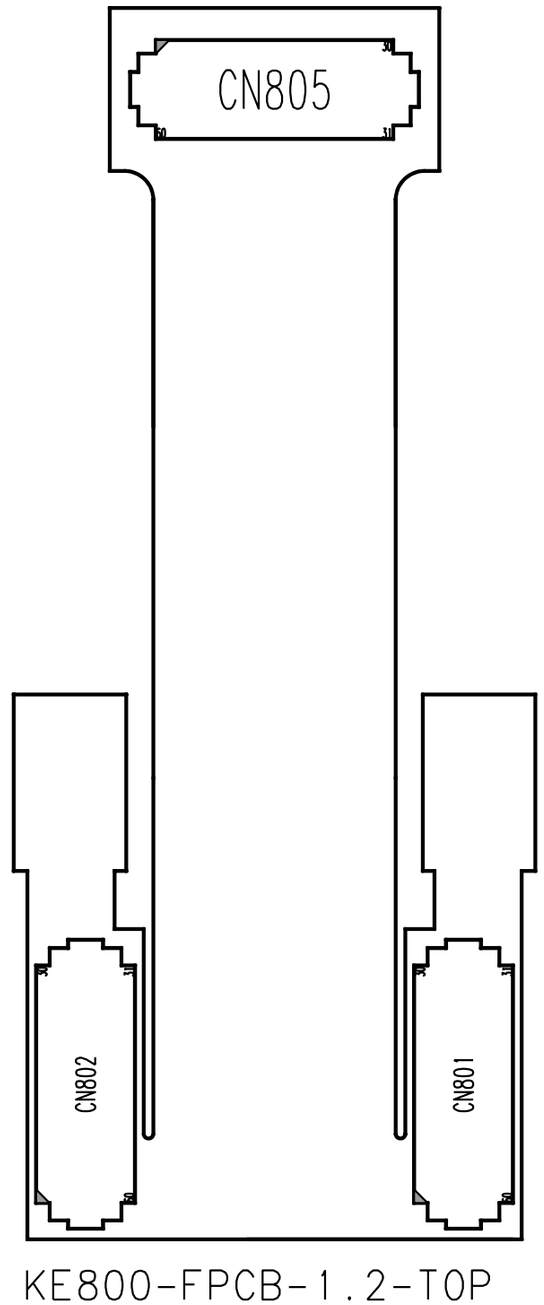
KE800-TOUCH-1.1-TOP

8. PCB LAYOUT



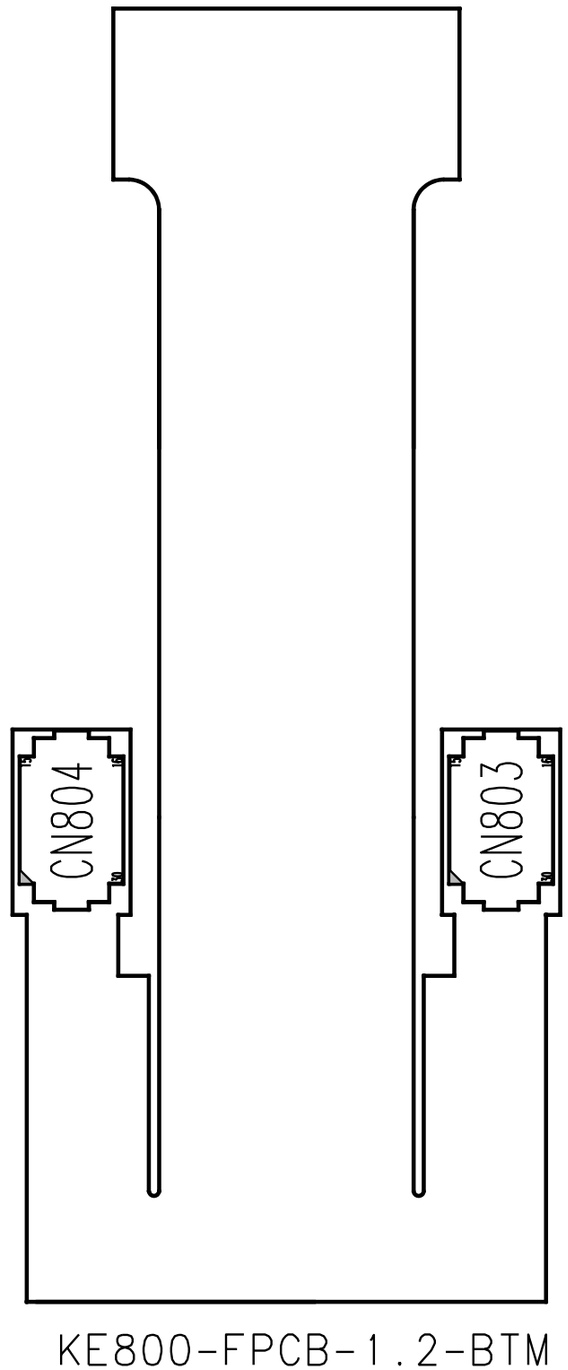
KE800-TOUCH-1.1-BTM

8. PCB LAYOUT



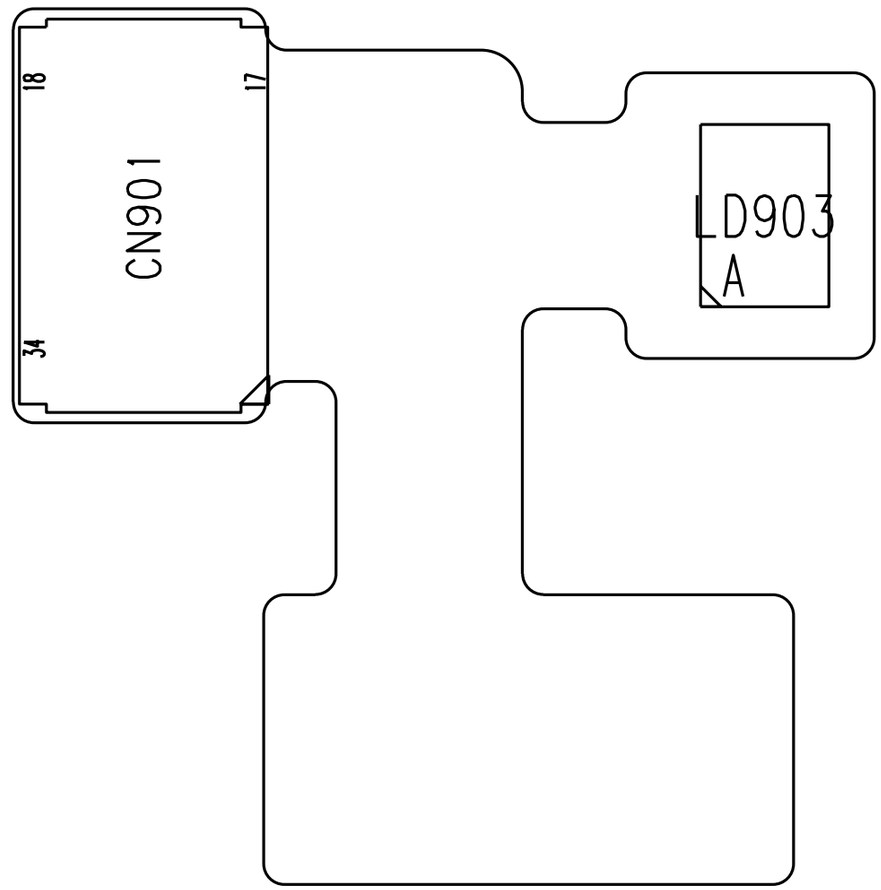
KE800-FPCB-1.2-TOP

8. PCB LAYOUT



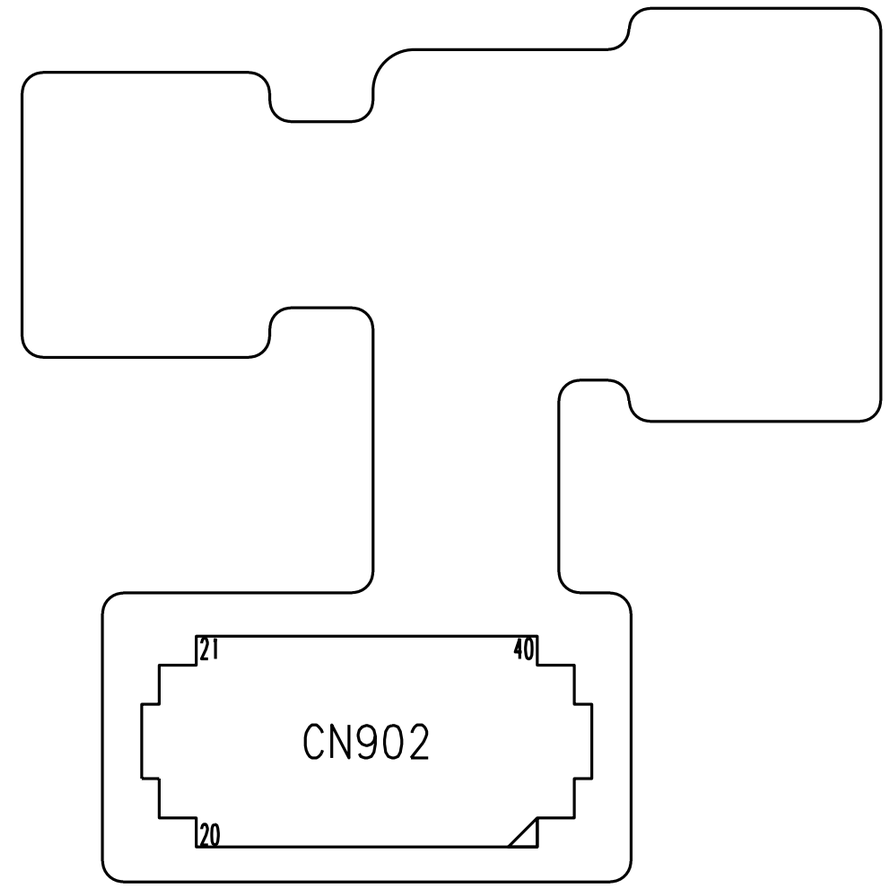
KE800-FPCB-1.2-BTM

8. PCB LAYOUT



KE800-SPCY0084001-1.1-TOP

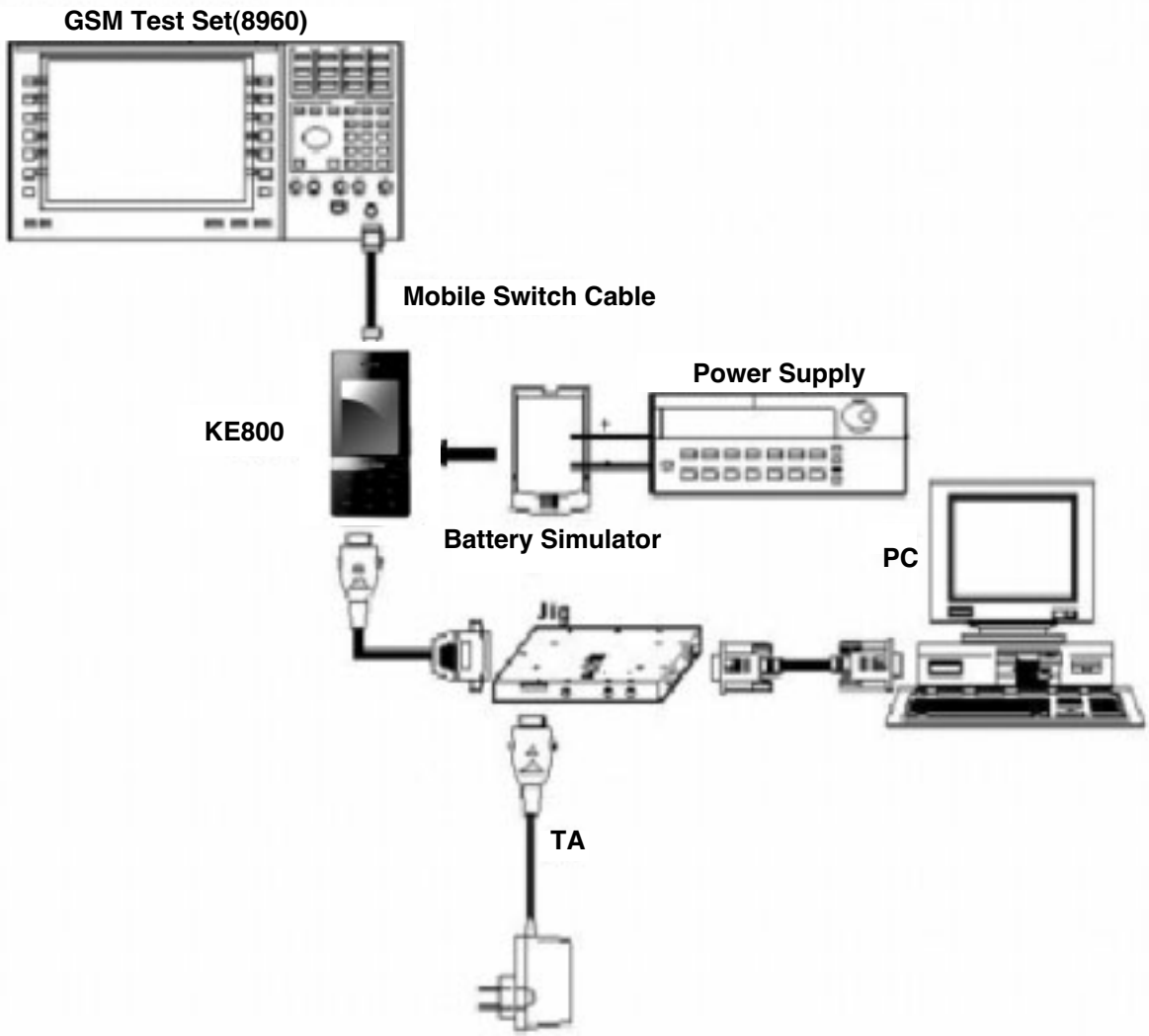
8. PCB LAYOUT



KE800-SPCY0084001-1.1-BTM

9. CALIBRATION

9.1 Calibration test equipment setup



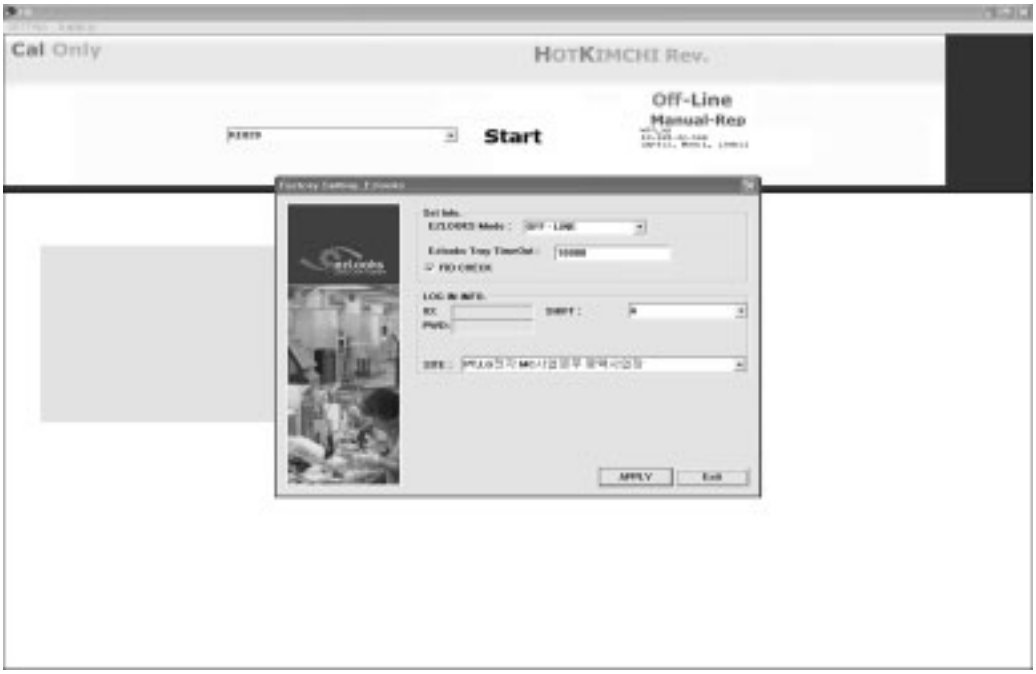
9.2 Calibration procedure

9.2.1. Turn on the Phone.

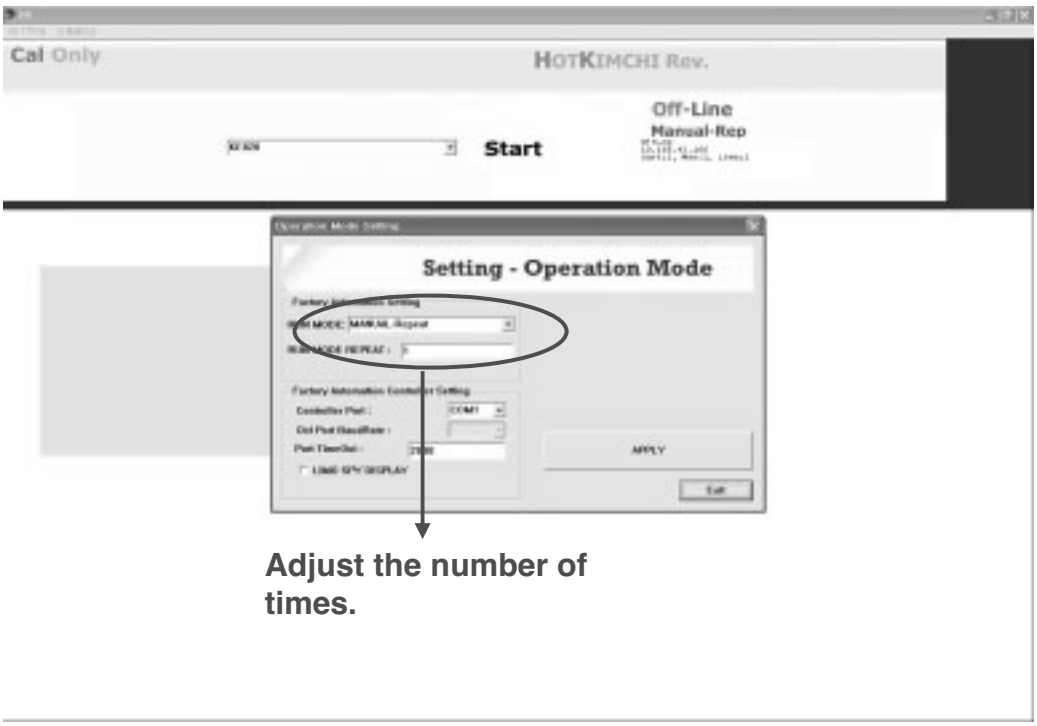
9.2.2. Execute “HK_24.exe”

9.2.3. Click “SETTING” Menu

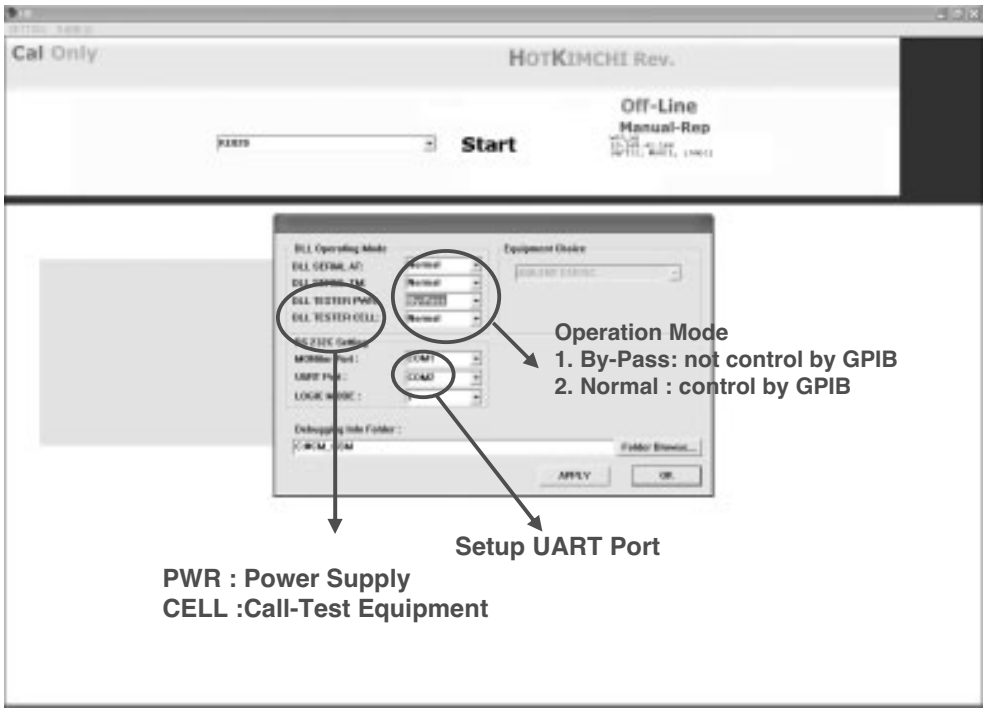
9.2.4. Setup “Ezlooks” menu such as the following.



9.2.5. Setup “Line System” menu such as the following.

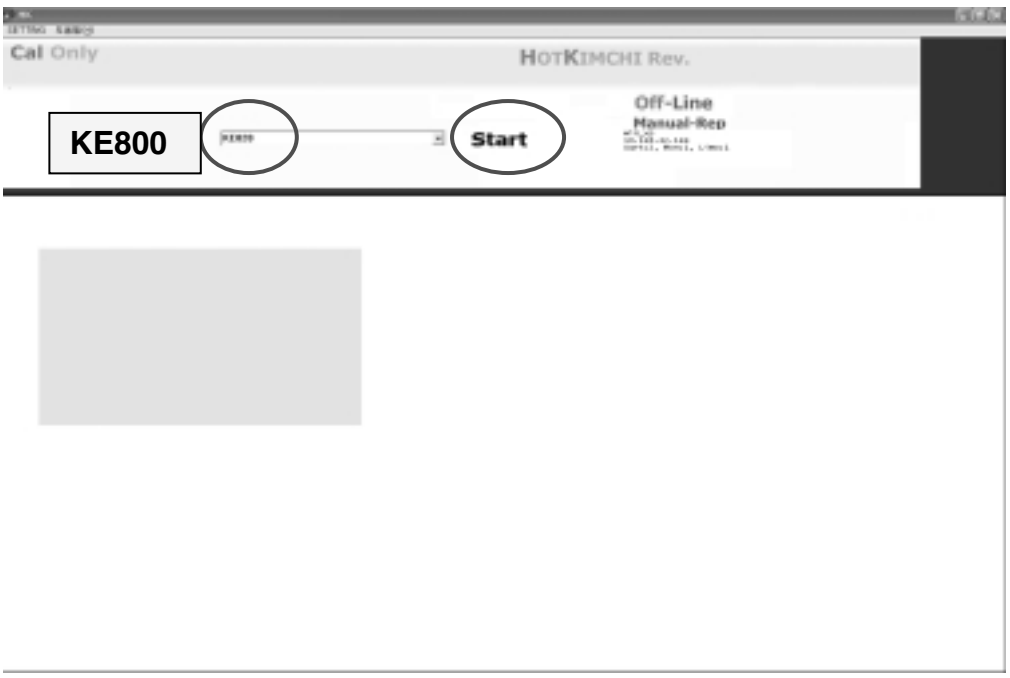


9.2.6. Setup Logic operation such as the following.



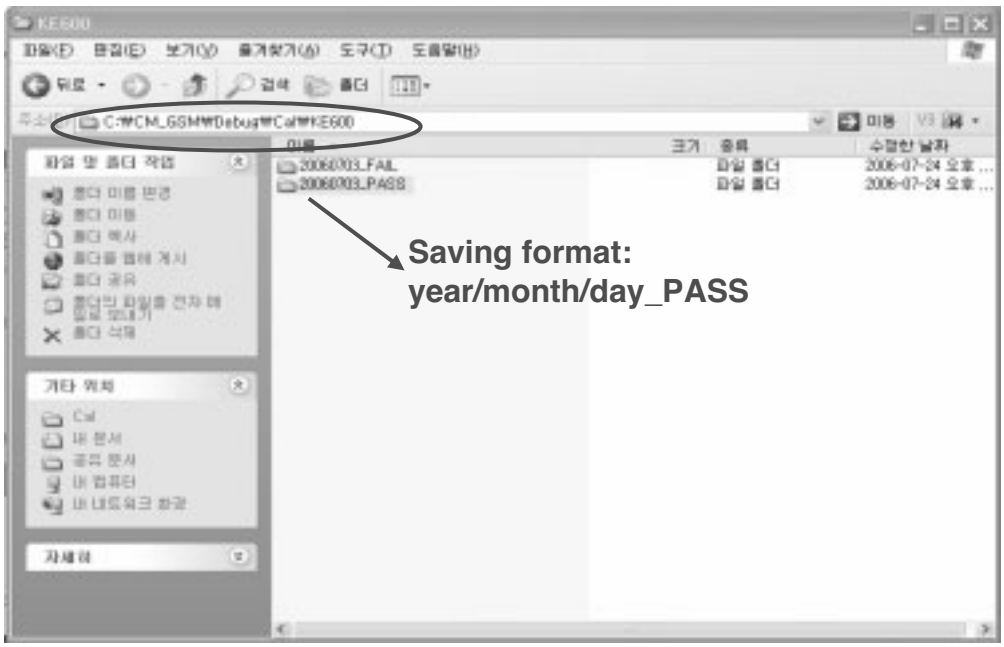
9.2.7. Select “MODEL”.

9.2.8. Click “START” for RF calibration



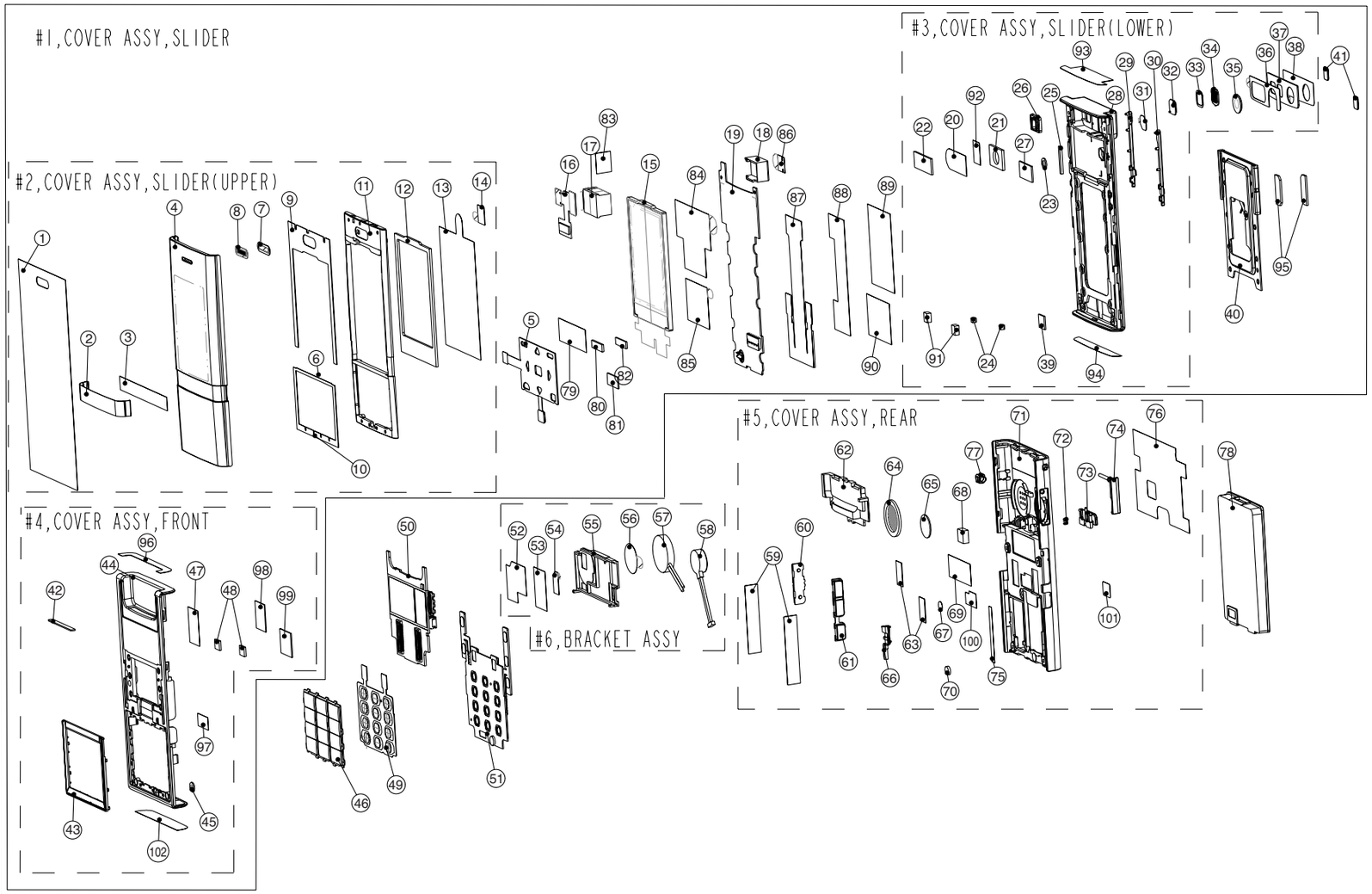
9.2.9 RF calibration finishes.

9.2.10 Calibration data will be saved to the following folder. (C:\CM_GSM\Debug\Cal\KE800)



10. EXPLODED VIEW & REPLACEMENT PART LIST

10.1 EXPLODED VIEW



NO.	DESCRIPTION	Q'TY	DRAWING NO.	REMARK
86	TAPE	1	MTAZ0154201	RECEIVER
85	TAPE	1	MTAZ0184901	
84	TAPE	1	MTAZ0186901	전도성
83	INSULATOR	1	MIDZ0122001	CAMERA
82	PAD	1	MPBZ0167301	LCD DOWN
81	PAD	1	MPBZ0167201	LCD
80	PAD	1	MPBZ0175701	LCD UP
79	INSULATOR	1	MIDZ0115401	LCD
78	BATTERY	1	SBPP0020301	
77	CAP,MOBILE SWITCH	1	MCCF0039801	
76	TAPE,PROTECTION	1	MTAB0143001	REAR
75	INSULATOR	1	MIDZ0120301	REAR SIDE
74	CAP,RECEPTACLE	1	MCCE0033101	
73	LOCKER,BATTERY	1	MLEA0035301	
72	SPRING,COIL	1	MSDB0001701	
71	COVER,REAR	1	MCJN0059201	
70	PAD	1	MPBZ0159901	REAR MIC
69	INSULATOR	1	MIDZ0110301	REAR
68	PAD	1	MPBZ0160101	REAR CON
67	LABEL,A/S	1	MLAB0001102	
66	ANTENNA,GSM,FIXED	1	SNGF0019701	BLUE TOOTH
65	PAD,MOTOR	1	MPBJ0037201	
64	PAD,SPEAKER	1	MPBN0035601	
63	GASKET,SHIELD FORM	2	MGAD0128601	
62	ANTENNA,GSM,FIXED	1	SNGF0019601	
61	BUTTON,FUNCTION	1	MBJC0020601	
60	BUTTON,VOLUME	1	MBJN0010501	
59	TAPE,BUTTON	2	MTAG0003001	FIXED
58	VIBRATOR,MOTMR	1	SJMY0006504	
57	SPEAKER	1	SUSY0015401	
56	TAPE	1	MTAZ0160701	SPEAKER
55	BRACKET	1	MBFZ0026601	GASKT HOLDER
54	TAPE	1	MTAZ0160601	HOLDER FIXED
53	INSULATOR	1	MIDZ0114701	RIGHT
52	INSULATOR	1	MIDZ0114601	LEFT
51	PCB ASSY,KEY PAD	1	SAEY0051601	
50	PCB ASSY,MAIN	1	SAFY0171701	
49	DOME ASSY,METAL	1	ADCA0058501	
48	PAD	2	MPBZ0160201	FRONT CON
47	INSULATOR	1	MIDZ0114501	FRONT
46	BUTTON,DIAL	1	MBJA0022201	
45	PAD,MIKE	1	MPBH0026401	
44	COVER,FRONT	1	MCJK0064902	
43	SUPPORT	1	MSHY0010801	
42	PAD	1	MPBZ0153701	STOPPER
41	CAP,SCREW	2	MCCH0094302	PC
40	RAIL	1	MRAY0003501	
39	PAD	1	MPBZ0153901	KEY PCB
38	TAPE,PROTECTION	1	MTAB0143201	DECO LOWER
37	DECO	1	MDAY0033402	LOWER
36	TAPE	1	MTAZ0153701	DECO LOWER
35	WINDOW,CAMERA	1	MWAE0021201	
34	WINDOW,FLASH	1	MWAH0007201	
33	TAPE	1	MTAZ0153901	
32	DECO	1	MDAY0033502	MIRROR
31	TAPE	1	MTAZ0153801	MIRROR
30	GUIDE,LEFT	1	MGDA0006502	
29	GUIDE,RIGHT	1	MGDB0002502	
28	COVER,SLIDE(LOWER)	1	MCJV0008502	
27	PAD	1	MPBZ0160301	CON CAMERA
26	CAP	1	MCCZ0020701	FLASH
25	MAGNET,SWITCH	1	MMAA0005201	
24	STOPPER	2	MSGY0018301	
23	PAD,MIKE	1	MPBH0026301	
22	GASKET,SHIELD FORM	1	MGAD0128501	LOWER
21	PAD,CAMERA	1	MPBT0033301	
20	TAPE, PROTECTION	1	MTAB0138301	CAMERA
19	PCB	1	SAEY0051701	FOLDER
18	BRACKET	1	MBFJ0000801	RECEIVER HOLDER
17	CAMERA	1	SVCY0011101	
16	PCB ASSY,FLEXIBLE	1	SPCY0084001	CAMERA
15	LCD MODULE	1	SVLM0021101	
14	TAPE	1	MTAZ0153501	CAMERA
13	TAPE, PROTECTION	1	MTAB0138401	LCD
12	PAD, LCD	1	MPBG0052401	
11	COVER,SLIDE(UPPER)	1	MCJW0009901	
10	TAPE,WINDOW	1	MTAD0060101	DOWN
9	TAPE, WINDOW	1	MTAD0059601	UP
8	DECO,RECEIVER	1	MDAH0020201	SUS
7	FILTER,RECEIVER	1	MFBB0018701	MESH
6	PLATE	1	MPFZ0026101	
5	PCB ASSY,FLEXIBLE	1	SPCY0082801	
4	WINDOW ASSY, LCD	1	AWAZ0009501	
3	TAPE	1	MTAZ0153601	DECO WINDOW
2	DECO, WINDOW	1	MDAL0007702	
1	TAPE, PROTECTION	1	MTAB0134601	WINDOW

NO.	DESCRIPTION	Q'TY	DRAWING NO.	REMARK
102	TAPE, PROTECTION	1	MTAB0157901	FRONT BOTTOM
101	LABEL	1	WLAZ0040401	WEEE
100	INSULTOR	1	MIDZ0120201	REAR BOTTOM
99	PAD	1	MPBZ0160001	FRONT MAIN
98	PAD	1	MPBZ0176901	FRONT RIGHT
97	TAPE, SHIELD	1	MTAB0157901	FRONT
96	TAPE, PROTECTION	1	MTAB0164901	FRONT TOP
95	PAD	2	MPBZ0154001	HINGE
94	TAPE, PROTECTION	1	MTAB0165001	LOWER BOTTOM
93	TAPE, PROTECTOIN	1	MTAB0157801	LOWER TOP
92	INSULATOR	1	MIDZ0122501	LOWER
91	PAD	2	MPBZ0160901	LOWER STOPPER
90	INSULATOR	1	MIDZ0119101	FPCB UP
89	INSULATOR	1	MIDZ0114801	FBCB DOWN
88	GASKET,SHIELD FORM	1	MGAD0131201	
87	PCB,FLEXIBLE	1	SACE0049501	SLIDER

NO.	DESCRIPTION	Q'TY	DRAWING NO.	REMARK
#6	BRACKET ASSY	1	ABFZ0010301	
#5	COVER ASSY,REAR	1	ACGM0080201	
#4	COVER ASSY,FRONT	1	ACGK0080402	
#3	COVER ASSY,SLIDER(LOWER)	1	ACGR0008402	
#2	COVER ASSY,SLIDER(UPPER)	1	ACGS0009402	
#1	COVER ASSY,SLIDER	1	ACGQ0011902	

10.2 Replacement Parts <Mechanic component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	Location No.	Description	Part Number	Specification	Color	Remark
1		GSM(SLIDE)	TGLL0005902		Black	
2	AAAY00	ADDITION	AAAY0195902		Silver	
2	APEY00	PHONE	APEY0327502		Silver	
3	ACGM00	COVER ASSY,REAR	ACGM0080201		Black	#5
4	MBJC00	BUTTON,FUNCTION	MBJC0020601	COMPLEX, (empty), , , , ,	Black	61
4	MBJN00	BUTTON,VOLUME	MBJN0010501	COMPLEX, (empty), , , , ,	Black	60
4	MCCE00	CAP,RECEPTACLE	MCCE0033101	COMPLEX, (empty), , , , ,	Black	74
4	MCJN00	COVER,REAR	MCJN0061201	MOLD, PC LUPOY SC-1004ML, , , , ,	Black	71
4	MGAD00	GASKET,SHIELD FORM	MGAD0128601	COMPLEX, (empty), , , , ,	Without Color	63
4	MIDZ00	INSULATOR	MIDZ0110301	COMPLEX, (empty), , , , ,	Black	69
4	MIDZ01	INSULATOR	MIDZ0120201	COMPLEX, (empty), , , , ,	Blue	100
4	MIDZ02	INSULATOR	MIDZ0120301	COMPLEX, (empty), , , , ,	Blue	75
4	MLAB00	LABEL,A/S	MLAB0001102	C2000 USASV DIA 4.0	White	67
4	MLAZ00	LABEL	MLAZ0040401	WEEE Marking Label	Without Color	101
4	MLEA00	LOCKER,BATTERY	MLEA0035301	COMPLEX, (empty), , , , ,	Black	73
4	MPBJ00	PAD,MOTOR	MPBJ0037201	COMPLEX, (empty), , , , ,	Black	65
4	MPBN00	PAD,SPEAKER	MPBN0035601	COMPLEX, (empty), , , , ,	Without Color	64
4	MPBZ00	PAD	MPBZ0159901	COMPLEX, (empty), , , , ,	Black	70
4	MPBZ02	PAD	MPBZ0160101	COMPLEX, (empty), , , , ,	Black	68
4	MSDB00	SPRING,COIL	MSDB0001701	G7000	Pearl White	72
4	MTAB00	TAPE,PROTECTION	MTAB0143001	COMPLEX, (empty), , , , ,	Transparent	76
4	MTAG00	TAPE,BUTTON	MTAG0003001	COMPLEX, (empty), , , , ,	Black	59
3	ACGQ00	COVER ASSY,SLIDE	ACGQ0011902		Silver	#1
4	ABFZ00	BRACKET ASSY	ABFZ0010001		Black	
5	MBFJ00	BRACKET,RECEIVER	MBFJ0000801	MOLD, PC LUPOY HI-1002M, , , , ,	Black	18
5	MTAZ00	TAPE	MTAZ0154201	COMPLEX, (empty), , , , ,	Without Color	86
4	ACGK00	COVER ASSY,FRONT	ACGK0080402		Silver	#4
5	MCJK00	COVER,FRONT	MCJK0066002	MOLD, Tempered Glass, , , , ,	Silver	44
5	MIDZ00	INSULATOR	MIDZ0114501	COMPLEX, (empty), , , , ,	Blue	47
5	MPBH02	PAD,MIKE	MPBH0026401	COMPLEX, (empty), , , , ,	Black	45

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
5	MPBZ00	PAD	MPBZ0153701	COMPLEX, (empty), , , , ,	Without Color	42
5	MPBZ01	PAD	MPBZ0160201	COMPLEX, (empty), , , , ,	Black	48
5	MPBZ02	PAD	MPBZ0160001	COMPLEX, (empty), , , , ,	Black	99
5	MPBZ03	PAD	MPBZ0176901	COMPLEX, (empty), , , , ,	Black	98
5	MSHY00	SUPPORT	MSHY0010801	MOLD, POM LUCEL HI-510, , , , ,	Black	43
5	MTAB00	TAPE,PROTECTION	MTAB0157901	COMPLEX, (empty), , , , ,	Blue	97,102
5	MTAB01	TAPE,PROTECTION	MTAB0164901	COMPLEX, (empty), , , , ,	Blue	96
5	MTAC00	TAPE,SHIELD	MTAC0042801	COMPLEX, (empty), , , , ,	Gold	
4	ACGR00	COVER ASSY, SLIDE(LOWER)	ACGR0008402		Silver	#3
5	MCCZ00	CAP	MCCZ0020701	MOLD, Silicone Rubber K-770, , , , ,	Black	26
5	MCJV00	COVER,SLIDE(LOWER)	MCJV0009002	MOLD, Tempered Glass, , , , ,	Silver	28
5	MDAY00	DECO	MDAY0033402	COMPLEX, (empty), , , , ,	Silver	37
5	MDAY01	DECO	MDAY0033502	COMPLEX, (empty), , , , ,	Silver	32
5	MGAD00	GASKET,SHIELD FORM	MGAD0128501	COMPLEX, (empty), , , , ,	Black	22
5	MGDA00	GUIDE,LEFT	MGDA0006502	MOLD, POM LUCEL HI-510, , , , ,	Silver	30
5	MGDB00	GUIDE,RIGHT	MGDB0002502	MOLD, POM LUCEL N109-LD, , , , ,	Silver	29
5	MIDZ00	INSULATOR	MIDZ0122501	COMPLEX, (empty), , , , ,	Blue	92
5	MMAA00	MAGNET,SWITCH	MMAA0005201		Metal Silver	25
5	MPBH00	PAD,MIKE	MPBH0026301	COMPLEX, (empty), , , , ,	Black	23
5	MPBT00	PAD,CAMERA	MPBT0033301	COMPLEX, (empty), , , , ,	Black	21
5	MPBZ00	PAD	MPBZ0153901	COMPLEX, (empty), , , , ,	Without Color	39
5	MPBZ01	PAD	MPBZ0160301	COMPLEX, (empty), , , , ,	Black	27
5	MPBZ02	PAD	MPBZ0160901	COMPLEX, (empty), , , , ,	Black	91
5	MSGY00	STOPPER	MSGY0018301	COMPLEX, (empty), , , , ,	Black	24
5	MTAB00	TAPE,PROTECTION	MTAB0138301	COMPLEX, (empty), , , , ,	Without Color	20
5	MTAB01	TAPE,PROTECTION	MTAB0143201	COMPLEX, (empty), , , , ,	Transparent	38
5	MTAB02	TAPE,PROTECTION	MTAB0157801	COMPLEX, (empty), , , , ,	Blue	93
5	MTAB03	TAPE,PROTECTION	MTAB0165001	COMPLEX, (empty), , , , ,	Blue	94
5	MTAZ00	TAPE	MTAZ0153701	COMPLEX, (empty), , , , ,	Without Color	36
5	MTAZ01	TAPE	MTAZ0153801	COMPLEX, (empty), , , , ,	Without Color	31
5	MTAZ02	TAPE	MTAZ0153901	COMPLEX, (empty), , , , ,	Without Color	33

Level	Location No.	Description	Part Number	Specification	Color	Remark
5	MWAE00	WINDOW,CAMERA	MWAE0021201		Black	35
5	MWAH00	WINDOW,FLASH	MWAH0007201	COMPLEX, (empty), , , , ,	Black	34
4	ACGS00	COVER ASSY, SLIDE(UPPER)	ACGS0009402		Black	#2
5	AWAZ00	WINDOW ASSY	AWAZ0009501		Without Color	4
6	BFAA00	FILM,INMOLD	BFAA0045301	; ,BLACK , , ,	Without Color	
6	MWAC00	WINDOW,LCD	MWAC0072801	CUTTING, Quartz Glass, , , , ,	Without Color	
5	MCJW00	COVER,SLIDE(UPPER)	MCJW0010601	MOLD, Tempered Glass, , , , ,	Black	
5	MDAH00	DECO,RECEIVER	MDAH0020201	PRESS, STS, , , , ,	Black	8
5	MDAL00	DECO,WINDOW	MDAL0007702	COMPLEX, (empty), 0.15, , , ,	Silver	2
5	MFBB00	FILTER,RECEIVER	MFBB0018701	COMPLEX, (empty), , , , ,	Without Color	7
5	MPBG00	PAD,LCD	MPBG0052401	COMPLEX, (empty), , , , ,	Black	12
5	MTAB00	TAPE,PROTECTION	MTAB0134601	COMPLEX, (empty), , , , ,	Without Color	1
5	MTAB01	TAPE,PROTECTION	MTAB0138401	COMPLEX, (empty), , , , ,	Without Color	13
5	MTAD00	TAPE,WINDOW	MTAD0059601	COMPLEX, (empty), , , , ,	Without Color	9
5	MTAD01	TAPE,WINDOW	MTAD0060101	COMPLEX, (empty), , , , ,	Without Color	10
5	MTAZ00	TAPE	MTAZ0153501	COMPLEX, (empty), , , , ,	Without Color	14
5	MTAZ01	TAPE	MTAZ0153601	COMPLEX, (empty), , , , ,	Without Color	3
4	GMEY00	SCREW MACHINE,BIND	GMEY0012901	1.4 mm,2.5 mm,MSWR3 ,B ,+ ,	Silver	
4	GMEY01	SCREW MACHINE,BIND	GMEY0010401	1.4 mm,2 mm,MSWR3(FN) ,N ,+ ,NYLOK	Silver	
4	MBAD00	BAG,VINYL(PE)	MBAD0006801		Transparent	
4	MCCH00	CAP,SCREW	MCCH0094302	COMPLEX, (empty), , , , ,	Silver	41
4	MGAD00	GASKET,SHIELD FORM	MGAD0131201	COMPLEX, (empty), , , , ,	Yellow	88
4	MIDZ00	INSULATOR	MIDZ0114801	COMPLEX, (empty), , , , ,	Transparent	89
4	MIDZ01	INSULATOR	MIDZ0114901	COMPLEX, (empty), , , , ,	Transparent	
4	MIDZ02	INSULATOR	MIDZ0115401	COMPLEX, (empty), , , , ,	Transparent	79
4	MIDZ03	INSULATOR	MIDZ0119101	COMPLEX, (empty), , , , ,	Blue	90
4	MIDZ04	INSULATOR	MIDZ0122001	COMPLEX, (empty), , , , ,	Blue	83
4	MLAC00	LABEL,BARCODE	MLAC0003401	EZ LOOKS(user for mechanical)	Without Color	
4	MPBZ00	PAD	MPBZ0154001	COMPLEX, (empty), , , , ,	Without Color	95

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
4	MPBZ01	PAD	MPBZ0167201	COMPLEX, (empty), , , , ,	Black	81
4	MPBZ02	PAD	MPBZ0167301	COMPLEX, (empty), , , , ,	Black	82
4	MPBZ03	PAD	MPBZ0175701	COMPLEX, (empty), , , , ,	Black	80
4	MPFZ00	PLATE	MPFZ0026101	COMPLEX, (empty), , , , ,	Black	6
4	MRAY00	RAIL	MRAY0003501	SLIDE HINGE RAIL	Black	40
4	MTAZ00	TAPE	MTAZ0140801		Without Color	
4	MTAZ01	TAPE	MTAZ0186901	COMPLEX, (empty), , , , ,	Transparent	84
4	MTAZ02	TAPE	MTAZ0184901	COMPLEX, (empty), , , , ,	Transparent	85
3	GMEY00	SCREW MACHINE,BIND	GMEY0011701	1.4 mm,2.5 mm,SWCH18A(3CZN-B) ,B ,+ ,NYLOK ,HEAD t=0.5, HEAD d2.7	WHITE SILVER	
3	MBJA00	BUTTON,DIAL	MBJA0022201	COMPLEX, (empty), , , , ,	Black	46
3	MCCF00	CAP,MOBILE SWITCH	MCCF0039801	COMPLEX, (empty), , , , ,	Black	77
3	MLAK00	LABEL,MODEL	MLAK0018616	KG110 MADE IN KOREA	Without Color	
5	ADCA00	DOME ASSY,METAL	ADCA0058501		Black	49
5	MPBZ00	PAD	MPBZ0169401	COMPLEX, (empty), , , , ,	Black	
5	MTAB00	TAPE,PROTECTION	MTAB0119201	COMPLEX, (empty), , , , ,	Without Color	
5	ABFZ00	BRACKET ASSY	ABFZ0010301		Without Color	#6
6	MBFZ00	BRACKET	MBFZ0026601	MOLD, PC LUPOY SC-1004ML, , , , ,	Black	55
6	MIDZ00	INSULATOR	MIDZ0114601	COMPLEX, (empty), , , , ,	Transparent	52
6	MIDZ01	INSULATOR	MIDZ0114701	COMPLEX, (empty), , , , ,	Transparent	53
6	MTAZ00	TAPE	MTAZ0160601	COMPLEX, (empty), , , , ,	Without Color	54
6	MTAZ01	TAPE	MTAZ0160701	COMPLEX, (empty), , , , ,	Without Color	56
5	MIDZ00	INSULATOR	MIDZ0122101	COMPLEX, (empty), , , , ,	Blue	
5	MPBZ00	PAD	MPBZ0169201	COMPLEX, (empty), , , , ,	Black	
5	MLAB00	LABEL,A/S	MLAB0000601	HUMIDITY STICKER	Without Color	
5	MLAZ00	LABEL	MLAZ0038301	PID Label 4 Array	Without Color	

<Main component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	Location No.	Description	Part Number	Specification	Color	Remark
4	SNGF00	ANTENNA,GSM,FIXED	SNGF0019601	4 ,-6 dBd, ,Internal, Triple(GSM900+DCS1800+PCS1900), Pb Free ,; ,TRIPLE , , ,		62
4	SNGF01	ANTENNA,GSM,FIXED	SNGF0019701	3 ,-7 dBd, ,Internal, Bluetooth, Pb Free ,; ,SINGLE , , ,		66
4	SACY00	PCB ASSY,FLEXIBLE	SACY0054801	POLYI ,0.5 mm,MULTI-4 ,KE800 MAIN FPCB		
5	SACE00	PCB ASSY,FLEXIBLE,SMT	SACE0049501	POLYI ,0.5 mm,MULTI-4 ,KE800 MAIN FPCB		87
6	SACC00	PCB ASSY,FLEXIBLE,SMT BOTTOM	SACC0029801			
7	CN803	CONNECTOR,BOARD TO BOARD	ENBY0023801	30 PIN,.4 mm,ETC , ,H=0.9, Header		
7	CN804	CONNECTOR,BOARD TO BOARD	ENBY0023801	30 PIN,.4 mm,ETC , ,H=0.9, Header		
6	SACD00	PCB ASSY,FLEXIBLE,SMT TOP	SACD0040501			
7	CN801	CONNECTOR,BOARD TO BOARD	ENBY0020202	60 PIN,0.4 mm,STRAIGHT ,AU ,STACKING HEIGHT 0.9 / HEADDER FOR KEYPAD TO MAIN		
7	CN802	CONNECTOR,BOARD TO BOARD	ENBY0020202	60 PIN,0.4 mm,STRAIGHT ,AU ,STACKING HEIGHT 0.9 / HEADDER FOR KEYPAD TO MAIN		
7	CN805	CONNECTOR,BOARD TO BOARD	ENBY0020202	60 PIN,0.4 mm,STRAIGHT ,AU ,STACKING HEIGHT 0.9 / HEADDER FOR KEYPAD TO MAIN		
6	SPCY00	PCB,FLEXIBLE	SPCY0081801	POLYI ,0.5 mm,MULTI-4 ,KE800 FPCB		
4	SACY01	PCB ASSY,FLEXIBLE	SACY0054901	POLYI , mm,MULTI-3 ,KE800 CAMERA FPCB		
5	SACE00	PCB ASSY,FLEXIBLE,SMT	SACE0049601	POLYI , mm,MULTI-3 ,KE800 CAMERA FPCB		
6	SACC00	PCB ASSY,FLEXIBLE,SMT BOTTOM	SACC0029701			
7	CN902	CONNECTOR,BOARD TO BOARD	ENBY0020201	40 PIN,0.4 mm,ETC , ,H=0.9, Header		
6	SACD00	PCB ASSY,FLEXIBLE,SMT TOP	SACD0040401			
7	CN901	CONNECTOR,BOARD TO BOARD	ENBY0015601	34 PIN,0.4 mm,STRAIGHT ,AU ,0.9MM HEIGHT		
7	LD901	DIODE,LED,MODULE	EDLM0006902	WHITE ,3 LED,3.2*2.8*1.9 ,R/TP ,common anode		
6	SPCY00	PCB,FLEXIBLE	SPCY0084001	POLYI , mm,MULTI-3 ,KE800 CAMERA FPCB		16
4	SACY02	PCB ASSY,FLEXIBLE	SACY0055001	POLYI ,.4 mm,MULTI-4 ,KE800 TOUCH , , , , , , , , , ,		
5	SACE00	PCB ASSY,FLEXIBLE,SMT	SACE0049701	POLYI ,.4 mm,MULTI-4 ,KE800 TOUCH , , , , , , , , , ,		
6	SACC00	PCB ASSY,FLEXIBLE,SMT BOTTOM	SACC0029601			
7	C101	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C102	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C103	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
7	CN101	CONNECTOR,BOARD TO BOARD	ENBY0018501	10 PIN,.4 mm,STRAIGHT , ,H=0.9,HEADER		
7	LD101	DIODE,LED,CHIP	EDLH0012001	RED ,ETC ,R/TP ,side view(PB-FREE)		
7	LD102	DIODE,LED,CHIP	EDLH0012001	RED ,ETC ,R/TP ,side view(PB-FREE)		
7	LD103	DIODE,LED,CHIP	EDLH0012001	RED ,ETC ,R/TP ,side view(PB-FREE)		
7	LD104	DIODE,LED,CHIP	EDLH0012001	RED ,ETC ,R/TP ,side view(PB-FREE)		
7	LD105	DIODE,LED,CHIP	EDLH0012001	RED ,ETC ,R/TP ,side view(PB-FREE)		
7	R101	RES,CHIP,MAKER	ERHZ0000204	100 Kohm,1/16W ,F ,1005 ,R/TP		
7	R102	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
7	R103	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
7	R104	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
7	R105	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
7	R106	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
7	R107	RES,CHIP,MAKER	ERHZ0000429	180 ohm,1/16W ,J ,1005 ,R/TP		
7	R108	RES,CHIP,MAKER	ERHZ0000204	100 Kohm,1/16W ,F ,1005 ,R/TP		
7	R109	RES,CHIP,MAKER	ERHZ0000411	120 ohm,1/16W ,J ,1005 ,R/TP		
7	R110	RES,CHIP,MAKER	ERHZ0000429	180 ohm,1/16W ,J ,1005 ,R/TP		
7	R111	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R112	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R113	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R114	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R115	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R116	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R117	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R118	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	R119	RES,CHIP,MAKER	ERHZ0000491	510 ohm,1/16W ,J ,1005 ,R/TP		
7	U101	IC	EUSY0277001	Cap sense Inputs device ,32 PIN,R/TP ,5*5 Capsense TrackPad		
6	SPCY00	PCB,FLEXIBLE	SPCY0082801	POLYI ,.4 mm,MULTI-4 ,KE800 TOUCH , , , , , , , , ,		5
4	SAJY00	PCB ASSY,SUB	SAJY0022901			
5	SAJE00	PCB ASSY,SUB,SMT	SAJE0017301			
6	SAJC00	PCB ASSY,SUB,SMT BOTTOM	SAJC0015701			
7	C704	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C705	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
7	C706	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		

Level	Location No.	Description	Part Number	Specification	Color	Remark
7	C712	VARISTOR	SEVY0003602	5.6 V, ,SMD ,1005, 60pF		
7	C721	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C722	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
7	C723	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C724	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
7	C725	CAP,CERAMIC,CHIP	ECCH0000155	10 nF,16V,K,X7R,HD,1005,R/TP		
7	C726	CAP,CERAMIC,CHIP	ECCH0005602	2.2 uF,16V ,K ,X5R ,HD ,1608 ,R/TP		
7	C727	CAP,CERAMIC,CHIP	ECCH0005602	2.2 uF,16V ,K ,X5R ,HD ,1608 ,R/TP		
7	C728	CAP,TANTAL,CHIP,MAKER	ECTZ0004201	22 uF,6.3V ,M ,STD ,2012 ,R/TP		
7	C729	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
7	C730	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
7	C731	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
7	C732	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
7	C733	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
7	C734	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
7	C735	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
7	C736	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
7	C740	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
7	C741	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
7	C742	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
7	C743	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
7	C744	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C745	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C746	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C747	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C749	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
7	C751	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
7	C752	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
7	CN701	CONNECTOR,BOARD TO BOARD	ENBY0020301	40 PIN,0.4 mm,ETC , ,H=0.9, Socket		
7	CN703	CONNECTOR,BOARD TO BOARD	ENBY0020402	60 PIN,0.4 mm,STRAIGHT ,AU ,STACKING HEIGHT 0.9 / SOCKET FOR KEYPAD TO MAIN		
7	CN704	CONNECTOR,BOARD TO BOARD	ENBY0018601	10 PIN,.4 mm,STRAIGHT , ,H=0.9, SOCKET		
7	FB701	FILTER,BEAD,CHIP	SFBH0007102	10 ohm,1005 ,Ferrite Bead		
7	FL701	VARISTOR	SEVY0005502	18 V, ,SMD ,10 Ohm , 7.5pF , 4ch Array		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
7	FL702	VARISTOR	SEVY0005502	18 V, ,SMD ,10 Ohm , 7.5pF , 4ch Array		
7	FL703	VARISTOR	SEVY0005502	18 V, ,SMD ,10 Ohm , 7.5pF , 4ch Array		
7	FL704	VARISTOR	SEVY0005502	18 V, ,SMD ,10 Ohm , 7.5pF , 4ch Array		
7	L701	INDUCTOR,CHIP	ELCH0005019	68 nH,J ,1005 ,R/TP ,		
7	L702	INDUCTOR,CHIP	ELCH0005019	68 nH,J ,1005 ,R/TP ,		
7	MIC701	MICROPHONE	SUMY0010508	PIN ,42 dB,4*4 ,SMD Bridge Type		
7	R701	RES,CHIP,MAKER	ERHZ0000464	330 ohm,1/16W ,J ,1005 ,R/TP		
7	R706	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
7	R707	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
7	R708	RES,CHIP,MAKER	ERHZ0000473	39 ohm,1/16W ,J ,1005 ,R/TP		
7	R709	RES,CHIP,MAKER	ERHZ0000473	39 ohm,1/16W ,J ,1005 ,R/TP		
7	R710	RES,CHIP,MAKER	ERHZ0000473	39 ohm,1/16W ,J ,1005 ,R/TP		
7	R716	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
7	R718	RES,CHIP,MAKER	ERHZ0000443	2200 ohm,1/16W ,J ,1005 ,R/TP		
7	R720	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
7	R722	RES,CHIP,MAKER	ERHZ0000443	2200 ohm,1/16W ,J ,1005 ,R/TP		
7	R724	RES,CHIP	ERHY0003301	100 ohm,1/16W ,J ,1005 ,R/TP		
7	R730	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
7	U701	IC	EUSY0223002	HVSOF5 ,5 PIN,R/TP ,150mA CMOS LDO WITH OUTPUT CONTROL / 2.8V		
7	U703	IC	EUSY0294001	3*3 DFN ,10 PIN,R/TP ,Dual(1.8V/150mA, 2.8V/300mA) LDO Regulator		
7	U704	IC	EUSY0223007	HVSOF5 ,5 PIN,R/TP ,2.5V, 150mA,LDO		
7	U705	IC	EUSY0223002	HVSOF5 ,5 PIN,R/TP ,150mA CMOS LDO WITH OUTPUT CONTROL / 2.8V		
7	VA701	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
7	VA702	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
7	VA703	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
7	VA704	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	SAJD00	PCB ASSY,SUB,SMT TOP	SAJD0017801			
7	C701	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C702	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C703	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C711	CAP,CERAMIC,CHIP	ECCH0000393	22 uF,6.3V ,M ,X5R ,HD ,2012 ,R/TP		
7	C717	DIODE,TVS	EDTY0008501	TFSC ,5 V,50 W,R/TP ,small size		
7	C718	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		

Level	Location No.	Description	Part Number	Specification	Color	Remark
7	C719	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C720	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
7	C737	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C738	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C739	CAP,CERAMIC,CHIP	ECCH0007901	10 uF,4V ,M ,X5R ,TC ,1608 ,R/TP		
7	C748	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
7	C750	CAP,TANTAL,CHIP	ECTH0004101	22 uF,6.3V ,M ,STD ,1608 ,R/TP		
7	C753	CAP,TANTAL,CHIP	ECTH0004101	22 uF,6.3V ,M ,STD ,1608 ,R/TP		
7	C754	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
7	C755	CAP,TANTAL,CHIP	ECTH0004101	22 uF,6.3V ,M ,STD ,1608 ,R/TP		
7	C756	CAP,CERAMIC,CHIP	ECCH0006201	4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP		
7	C757	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
7	C758	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
7	CN702	CONNECTOR,FFC/FPC	ENQY0010901	35 PIN,0.3 mm,ETC , ,H=1.2		
7	FB702	FILTER,BEAD,CHIP	SFBH0000903	600 ohm,1005 ,		
7	FB703	FILTER,BEAD,CHIP	SFBH0000903	600 ohm,1005 ,		
7	FB704	FILTER,BEAD,CHIP	SFBH0008101	600 ohm,1005 ,		
7	Q701	TR,BJT,NPN	EQBN0004801	SMT6 ,0.2 W,R/TP ,		
7	R702	RES,CHIP,MAKER	ERHZ0000529	1.5 Kohm,1/16W ,J ,1005 ,R/TP		
7	R703	RES,CHIP,MAKER	ERHZ0000464	330 ohm,1/16W ,J ,1005 ,R/TP		
7	R704	RES,CHIP,MAKER	ERHZ0000533	7.5 Kohm,1/16W ,J ,1005 ,R/TP		
7	R705	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
7	R711	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
7	R714	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
7	R715	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
7	R717	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
7	R721	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
7	R723	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
7	R725	RES,CHIP,MAKER	ERHZ0000485	4700 ohm,1/16W ,J ,1005 ,R/TP		
7	R726	RES,CHIP,MAKER	ERHZ0002401	12 Kohm,1/16W ,J ,1005 ,R/TP		
7	R727	RES,CHIP,MAKER	ERHZ0000402	10 ohm,1/16W ,J ,1005 ,R/TP		
7	R728	RES,CHIP,MAKER	ERHZ0000402	10 ohm,1/16W ,J ,1005 ,R/TP		
7	U702	IC	EUSY0245401	DFN ,16 PIN,R/TP ,Main 3 LEDs(60mA) + Flash (300mA) Charge pump		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
7	U706	IC	EUSY0223003	HVSOF5 ,5 PIN,R/TP ,150mA CMOS LDO WITH OUTPUT CONTROL / 3.3V		
7	ZD701	DIODE,TVS	EDTY0007501	SOD-523 ,5 V,240 W,R/TP ,Vc 12.5V , 160pF , 1.6*0.8*.06		
6	SPJY00	PCB,SUB	SPJY0032701	FR-4 ,0.5 mm,BUILD-UP 4 ,KE800 SUB(Slide) PCB		
4	SBCL00	BATTERY,CELL,LITHIUM	SBCL0001303	2 V,1 mAh,COIN ,SOLDER TYPE BACKUP BATTERY		
4	SURY00	RECEIVER	SURY0005603	ASSY ,106 dB,32 ohm,1107*4.0 ,		
4	SVCY00	CAMERA	SVCY0011101	CMOS ,MEGA ,2M AF		17
4	SVLM00	LCD MODULE	SVLM0021101	MAIN ,240*320 ,37.2*52.1*1.9(t) ,262k ,TFT ,TM ,R63400 ,NTSC:50,IPS		15
3	SAEY00	PCB ASSY,KEYPAD	SAEY0051601			51
4	SAEB00	PCB ASSY, KEYPAD,INSERT	SAEB0017501			
5	SPKY00	PCB,SIDEKEY	SPKY0038601	POLYI ,0.65 mm,DOUBLE ,KE800 MP3 SIDE KEY , , , , , , , , ,		
5	SPKY01	PCB,SIDEKEY	SPKY0039601	POLYI ,.65 mm,DOUBLE ,KE800 F-SK2- (VOLUME) , , , , , , , , , ,		
4	SAEE00	PCB ASSY,KEYPAD,SMT	SAEE0019201			
5	SAEC00	PCB ASSY,KEYPAD,SMT BOTTOM	SAEC0017201			
6	C601	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C602	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C603	CAP,TANTAL,CHIP,MAKER	ECTZ0004204	100 uF,6.3V ,M ,STD ,3216 ,R/TP		
6	C604	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C605	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C606	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C607	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C608	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C609	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C610	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C611	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C612	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C613	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C614	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C615	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C616	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C617	CAP,CERAMIC,CHIP	ECCH0000143	1 nF,50V,K,X7R,HD,1005,R/TP		
6	C618	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	C619	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C620	CAP,CHIP,MAKER	ECZH0000844	68 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C621	CAP,CERAMIC,CHIP	ECCH0000153	6.8 nF,25V,K,X7R,HD,1005,R/TP		
6	C623	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C624	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C626	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C630	CAP,CERAMIC,CHIP	ECCH0000104	3 pF,50V,C,NP0,TC,1005,R/TP		
6	C631	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C632	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C633	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C634	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C635	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C636	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C637	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C639	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C640	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C641	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C642	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C643	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	CN601	CONNECTOR,ETC	ENZY0017701	3 PIN,2.5 mm,ETC , ,H=1.4		
6	CN602	CONNECTOR,BOARD TO BOARD	ENBY0023901	30 PIN,0.4 mm,ETC , ,H=0.9, Socket		
6	CN605	CONNECTOR,BOARD TO BOARD	ENBY0023901	30 PIN,0.4 mm,ETC , ,H=0.9, Socket		
6	D601	DIODE,TVS	EDTY0008501	TFSC ,5 V,50 W,R/TP ,small size		
6	D602	DIODE,TVS	EDTY0008501	TFSC ,5 V,50 W,R/TP ,small size		
6	D603	DIODE,TVS	EDTY0008501	TFSC ,5 V,50 W,R/TP ,small size		
6	D604	DIODE,TVS	EDTY0008501	TFSC ,5 V,50 W,R/TP ,small size		
6	FL602	FILTER,SAW	SFSY0028001	2441 MHz,2.0*1.25*1.0 ,SMD ,Pb-free_BT SAW_PMB8753 Module matching		
6	J601	CONN,SOCKET	ENSY0011401	8 PIN,ETC , ,2.54 mm,UIM Card Guide		
6	J602	CONN,SOCKET	ENSY0017701	8 PIN,ETC , , mm,Micro-SD, Hinge type		
6	L601	INDUCTOR,SMD,POWER	ELCP0006801	820 uH,K ,3.8*3.8*1.3 ,R/TP ,		
6	L602	INDUCTOR,CHIP	ELCH0004703	1 nH,S ,1005 ,R/TP ,		
6	L603	INDUCTOR,CHIP	ELCH0004703	1 nH,S ,1005 ,R/TP ,		
6	MIC601	MICROPHONE	SUMY0009203	UNIT ,42 dB,4*1.5 ,Reverse TYPE		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	Q601	TR,FET,P-CHANNEL	EQFP0004501	SOT-323 ,.29 W,1.8 V,.86 A,R/TP ,P-Chanel MOSFET, Pb free		
6	R603	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R604	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R606	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
6	R607	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R608	RES,CHIP,MAKER	ERHZ0000485	4700 ohm,1/16W ,J ,1005 ,R/TP		
6	R609	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R610	RES,CHIP,MAKER	ERHZ0000312	68 Kohm,1/16W ,F ,1005 ,R/TP		
6	R611	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R613	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R615	RES,CHIP,MAKER	ERHZ0000412	1200 ohm,1/16W ,J ,1005 ,R/TP		
6	R618	RES,CHIP,MAKER	ERHZ0000412	1200 ohm,1/16W ,J ,1005 ,R/TP		
6	R620	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R621	RES,CHIP	ERHY0000275	56K ohm,1/16W,J,1005,R/TP		
6	R623	RES,CHIP	ERHY0000275	56K ohm,1/16W,J,1005,R/TP		
6	R624	RES,CHIP	ERHY0000275	56K ohm,1/16W,J,1005,R/TP		
6	R625	RES,CHIP	ERHY0000275	56K ohm,1/16W,J,1005,R/TP		
6	R626	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R627	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R628	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R629	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R630	RES,CHIP,MAKER	ERHZ0000487	470 Kohm,1/16W ,J ,1005 ,R/TP		
6	R631	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R632	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R633	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R634	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R635	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R636	RES,CHIP,MAKER	ERHZ0000505	680 ohm,1/16W ,J ,1005 ,R/TP		
6	R637	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
6	U601	IC	EUSY0274901	P-WFSGA-65(5*5*0.8) ,65 PIN,R/TP ,True Single Chip Bluetooth2.0+EDR solution		
6	U602	IC	EUSY0250101	MSOP ,8 PIN,R/TP ,AC_182Vpp EL DRIV		
6	VA601	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	VA602	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	VA603	VARISTOR	SEVY0003601	5.6 V, ,SMD ,100pF, 1005		
6	VA604	VARISTOR	SEVY0003601	5.6 V, ,SMD ,100pF, 1005		
6	VA605	VARISTOR	SEVY0003601	5.6 V, ,SMD ,100pF, 1005		
6	VA606	VARISTOR	SEVY0003601	5.6 V, ,SMD ,100pF, 1005		
6	VA607	VARISTOR	SEVY0003601	5.6 V, ,SMD ,100pF, 1005		
6	VA608	VARISTOR	SEVY0003601	5.6 V, ,SMD ,100pF, 1005		
6	VA609	VARISTOR	SEVY0003601	5.6 V, ,SMD ,100pF, 1005		
6	ZD601	DIODE,ZENER	EDNY0010401	USC ,100 V,0.2 W,R/TP ,		
5	SPEY00	PCB,KEYPAD	SPEY0044101	FR-4 ,0.5 mm,BUILD-UP 6 ,KE800 KEY PCB		
3	SAFY00	PCB ASSY,MAIN	SAFY0171704			50
4	SAFB00	PCB ASSY,MAIN,INSERT	SAFB0064601			
6	SJMY00	VIBRATOR,MOTOR	SJMY0006504	3 V,80 mA,10*3.45 ,Elco 8000 Conn		58
6	SUSY00	SPEAKER	SUSY0025201	ASSY ,8 ohm,89 dB,16 mm,3T, elco 8000 20mm ,; , , , , , , ,CONNECTOR		
4	SAFF00	PCB ASSY,MAIN,SMT	SAFF0093204			
5	SAFC00	PCB ASSY,MAIN,SMT BOTTOM	SAFC0078301			
6	C201	CAP,TANTAL,CHIP,MAKER	ECTZ0003901	10 uF,16V ,M ,STD ,ETC ,R/TP		
6	C202	CAP,TANTAL,CHIP,MAKER	ECTZ0004204	100 uF,6.3V ,M ,STD ,3216 ,R/TP		
6	C230	CAP,CERAMIC,CHIP	ECCH0006201	4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP		
6	C231	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C232	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C233	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C235	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C236	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C237	CAP,CERAMIC,CHIP	ECCH0000122	47 pF,50V,J,NP0,TC,1005,R/TP		
6	C238	CAP,CERAMIC,CHIP	ECCH0000122	47 pF,50V,J,NP0,TC,1005,R/TP		
6	C239	CAP,CERAMIC,CHIP	ECCH0000165	68 nF,6.3V,K,X5R,HD,1005,R/TP		
6	C240	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C244	CAP,CHIP,MAKER	ECZH0001211	220 nF,10V ,Z ,Y5V ,HD ,1005 ,R/TP		
6	C245	CAP,CHIP,MAKER	ECZH0001211	220 nF,10V ,Z ,Y5V ,HD ,1005 ,R/TP		
6	C247	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C248	CAP,CERAMIC,CHIP	ECCH0000165	68 nF,6.3V,K,X5R,HD,1005,R/TP		
6	C302	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C303	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	C304	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C305	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C306	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C307	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C311	RES,CHIP,MAKER	ERHZ0000204	100 Kohm,1/16W ,F ,1005 ,R/TP		
6	C313	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C314	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C401	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C402	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C403	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C404	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C410	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C411	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C412	CAP,CERAMIC,CHIP	ECCH0007901	10 uF,4V ,M ,X5R ,TC ,1608 ,R/TP		
6	C413	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C414	CAP,CERAMIC,CHIP	ECCH0006201	4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP		
6	C415	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
6	C416	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
6	C417	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
6	C418	CAP,CERAMIC,CHIP	ECCH0000113	18 pF,50V,J,NP0,TC,1005,R/TP		
6	C419	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C420	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C424	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C425	CAP,TANTAL,CHIP,MAKER	ECTZ0004204	100 uF,6.3V ,M ,STD ,3216 ,R/TP		
6	C426	CAP,TANTAL,CHIP,MAKER	ECTZ0004204	100 uF,6.3V ,M ,STD ,3216 ,R/TP		
6	C427	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C428	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C429	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C501	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C502	CAP,CHIP,MAKER	ECZH0000802	1 pF,50V ,C ,NP0 ,TC ,1005 ,R/TP		
6	C504	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C505	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
6	C506	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		
6	C507	CAP,CERAMIC,CHIP	ECCH0000120	39 pF,50V,J,NP0,TC,1005,R/TP		

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	C508	CAP,CERAMIC,CHIP	ECCH0000178	1.8 pF,50V ,D ,NP0 ,TC ,1005 ,R/TP		
6	C509	CAP,CERAMIC,CHIP	ECCH0000178	1.8 pF,50V ,D ,NP0 ,TC ,1005 ,R/TP		
6	C510	CAP,CERAMIC,CHIP	ECCH0000175	2.7 pF,50V ,B ,NP0 ,TC ,1005 ,R/TP		
6	C511	CAP,CERAMIC,CHIP	ECCH0000175	2.7 pF,50V ,B ,NP0 ,TC ,1005 ,R/TP		
6	C512	CAP,CERAMIC,CHIP	ECCH0000173	1.2 pF,16V ,B ,NP0 ,TC ,1005 ,R/TP		
6	C513	CAP,CERAMIC,CHIP	ECCH0000173	1.2 pF,16V ,B ,NP0 ,TC ,1005 ,R/TP		
6	C514	CAP,CHIP,MAKER	ECZH0001106	4700 pF,25V ,K ,X7R ,HD ,1005 ,R/TP		
6	C515	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C516	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C518	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C521	CAP,CHIP,MAKER	ECZH0001126	820 pF,50V ,K ,X7R ,HD ,1005 ,R/TP		
6	C522	CAP,CHIP,MAKER	ECZH0001002	0.5 pF,50V ,B ,NP0 ,TC ,1005 ,R/TP		
6	C523	CAP,CERAMIC,CHIP	ECCH0000173	1.2 pF,16V ,B ,NP0 ,TC ,1005 ,R/TP		
6	C524	CAP,CERAMIC,CHIP	ECCH0002002	47000 pF,10V ,K ,B ,HD ,1005 ,R/TP		
6	C525	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C526	CAP,CERAMIC,CHIP	ECCH0000152	5.6 nF,25V,K,X7R,HD,1005,R/TP		
6	C527	CAP,CERAMIC,CHIP	ECCH0000110	10 pF,50V,D,NP0,TC,1005,R/TP		
6	C529	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C530	CAP,CERAMIC,CHIP	ECCH0000129	120 pF,50V,J,NP0,TC,1005,R/TP		
6	C533	CAP,CERAMIC,CHIP	ECCH0000143	1 nF,50V,K,X7R,HD,1005,R/TP		
6	C538	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C539	CAP,CERAMIC,CHIP	ECCH0002002	47000 pF,10V ,K ,B ,HD ,1005 ,R/TP		
6	C540	CAP,CERAMIC,CHIP	ECCH0000143	1 nF,50V,K,X7R,HD,1005,R/TP		
6	C541	CAP,TANTAL,CHIP,MAKER	ECTZ0004203	68 uF,6.3V ,M ,STD ,3216 ,R/TP		
6	C542	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C543	CAP,CERAMIC,CHIP	ECCH0000143	1 nF,50V,K,X7R,HD,1005,R/TP		
6	C547	CAP,CHIP,MAKER	ECZH0001126	820 pF,50V ,K ,X7R ,HD ,1005 ,R/TP		
6	C551	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	CN201	CONN,RECEPTACLE	ENEY0003801	2 PIN, , ,		
6	CN202	CONN,RECEPTACLE	ENEY0003801	2 PIN, , ,		
6	CN401	CONNECTOR,I/O	ENRY0006401	18 PIN,0.4 mm,ANGLE , ,H=2.5, Reverse Type		
6	FB202	FILTER,BEAD,CHIP	SFBH0008102	1800 ohm,1005 ,Bead		
6	FB401	FILTER,BEAD,CHIP	SFBH0007102	10 ohm,1005 ,Ferrite Bead		
6	FB402	FILTER,BEAD,CHIP	SFBH0007102	10 ohm,1005 ,Ferrite Bead		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	FB403	FILTER,BEAD,CHIP	SFBH0008102	1800 ohm,1005 ,Bead		
6	FB404	FILTER,BEAD,CHIP	SFBH0008102	1800 ohm,1005 ,Bead		
6	FB405	FILTER,BEAD,CHIP	SFBH0007102	10 ohm,1005 ,Ferrite Bead		
6	FB408	FILTER,BEAD,CHIP	SFBH0008102	1800 ohm,1005 ,Bead		
6	FB409	FILTER,BEAD,CHIP	SFBH0008102	1800 ohm,1005 ,Bead		
6	FB410	FILTER,BEAD,CHIP	SFBH0008102	1800 ohm,1005 ,Bead		
6	FB411	FILTER,BEAD,CHIP	SFBH0008102	1800 ohm,1005 ,Bead		
6	FL301	FILTER,EMI/POWER	SFEY0011701	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (10 Ohm,7.5pF)		
6	FL302	FILTER,EMI/POWER	SFEY0010501	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free		
6	FL303	FILTER,EMI/POWER	SFEY0011701	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (10 Ohm,7.5pF)		
6	FL304	FILTER,EMI/POWER	SFEY0010501	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free		
6	FL305	FILTER,EMI/POWER	SFEY0011701	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (10 Ohm,7.5pF)		
6	FL306	FILTER,EMI/POWER	SFEY0010501	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free		
6	FL307	FILTER,EMI/POWER	SFEY0011701	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (10 Ohm,7.5pF)		
6	FL308	FILTER,EMI/POWER	SFEY0011601	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (50 Ohm,15pF)		
6	FL309	FILTER,EMI/POWER	SFEY0011601	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (50 Ohm,15pF)		
6	FL310	FILTER,EMI/POWER	SFEY0010501	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free		
6	FL311	FILTER,EMI/POWER	SFEY0010501	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (100Ohm,15pF), Pb-free		
6	FL312	FILTER,EMI/POWER	SFEY0011701	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (10 Ohm,7.5pF)		
6	FL313	FILTER,EMI/POWER	SFEY0011701	SMD ,SMD ,18 V,4ch. EMI_ESD Filter (10 Ohm,7.5pF)		
6	FL501	FILTER,SEPERATOR	SFAY0007201	850.900 ,1800.1900 ,4.0 dB,4.0 dB, dB, dB,ETC ,Quad band FEM		
6	L401	INDUCTOR,CHIP	ELCH0005009	100 nH,J ,1005 ,R/TP ,		
6	L402	INDUCTOR,CHIP	ELCH0005009	100 nH,J ,1005 ,R/TP ,		
6	L404	INDUCTOR,CHIP	ELCH0005009	100 nH,J ,1005 ,R/TP ,		
6	L405	INDUCTOR,CHIP	ELCH0005009	100 nH,J ,1005 ,R/TP ,		
6	L501	INDUCTOR,CHIP	ELCH0003820	3 nH,S ,1005 ,R/TP ,PBFREE		
6	L502	CAP,CHIP,MAKER	ECZH0001002	0.5 pF,50V ,B ,NP0 ,TC ,1005 ,R/TP		
6	L503	INDUCTOR,CHIP	ELCH0001402	18 nH,J ,1005 ,R/TP ,Pb Free		
6	L504	INDUCTOR,CHIP	ELCH0005014	5.6 nH,S ,1005 ,R/TP ,		
6	L505	INDUCTOR,CHIP	ELCH0005014	5.6 nH,S ,1005 ,R/TP ,		
6	Q401	TR,BJT,NPN	EQBN0007001	SC-70 ,.1 W,R/TP ,Pb free		
6	R205	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	R219	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R220	RES,CHIP,MAKER	ERHZ0000485	4700 ohm,1/16W ,J ,1005 ,R/TP		
6	R223	RES,CHIP,MAKER	ERHZ0000485	4700 ohm,1/16W ,J ,1005 ,R/TP		
6	R302	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R303	RES,CHIP,MAKER	ERHZ0000499	5600 ohm,1/16W ,J ,1005 ,R/TP		
6	R306	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R401	RES,CHIP,MAKER	ERHZ0000407	1000 Kohm,1/16W ,J ,1005 ,R/TP		
6	R402	RES,CHIP,MAKER	ERHZ0000270	33 ohm,1/16W ,F ,1005 ,R/TP		
6	R404	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R405	RES,CHIP	ERHY0000132	22K ohm,1/16W,F,1005,R/TP		
6	R406	RES,CHIP,MAKER	ERHZ0000204	100 Kohm,1/16W ,F ,1005 ,R/TP		
6	R407	RES,CHIP,MAKER	ERHZ0000529	1.5 Kohm,1/16W ,J ,1005 ,R/TP		
6	R408	RES,CHIP,MAKER	ERHZ0000445	220 Kohm,1/16W ,J ,1005 ,R/TP		
6	R409	RES,CHIP,MAKER	ERHZ0000443	2200 ohm,1/16W ,J ,1005 ,R/TP		
6	R411	RES,CHIP,MAKER	ERHZ0000270	33 ohm,1/16W ,F ,1005 ,R/TP		
6	R412	RES,CHIP,MAKER	ERHZ0000270	33 ohm,1/16W ,F ,1005 ,R/TP		
6	R414	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R416	RES,CHIP,MAKER	ERHZ0000483	47 ohm,1/16W ,J ,1005 ,R/TP		
6	R417	RES,CHIP,MAKER	ERHZ0000483	47 ohm,1/16W ,J ,1005 ,R/TP		
6	R424	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R425	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R426	RES,CHIP,MAKER	ERHZ0000483	47 ohm,1/16W ,J ,1005 ,R/TP		
6	R427	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R428	RES,CHIP,MAKER	ERHZ0000483	47 ohm,1/16W ,J ,1005 ,R/TP		
6	R429	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R430	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R432	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R433	RES,CHIP,MAKER	ERHZ0000529	1.5 Kohm,1/16W ,J ,1005 ,R/TP		
6	R434	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
6	R437	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
6	R442	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R443	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R447	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R502	RES,CHIP	ERHY0000185	820 ohm,1/16W ,F ,1005 ,R/TP		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	R503	INDUCTOR,CHIP	ELCH0001034	3.3 nH,S ,1005 ,R/TP ,PBFREE		
6	R504	INDUCTOR,CHIP	ELCH0003820	3 nH,S ,1005 ,R/TP ,PBFREE		
6	R505	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
6	R507	RES,CHIP	ERHY0000101	0 ohm,1/16W,F,1005,R/TP		
6	R508	RES,CHIP,MAKER	ERHZ0000501	620 ohm,1/16W ,J ,1005 ,R/TP		
6	R509	RES,CHIP	ERHY0000101	0 ohm,1/16W,F,1005,R/TP		
6	R510	RES,CHIP,MAKER	ERHZ0000402	10 ohm,1/16W ,J ,1005 ,R/TP		
6	R511	RES,CHIP,MAKER	ERHZ0000412	1200 ohm,1/16W ,J ,1005 ,R/TP		
6	R512	RES,CHIP,MAKER	ERHZ0000244	22 Kohm,1/16W ,F ,1005 ,R/TP		
6	R513	THERMISTOR	SETY0006301	NTC ,10000 ohm,SMD ,1005, 3350~3399k, J, R/T, PBFREE		
6	R514	RES,CHIP,MAKER	ERHZ0000402	10 ohm,1/16W ,J ,1005 ,R/TP		
6	SW501	CONN,RF SWITCH	ENWY0004201	,DIP , dB,H=2.8, Angle Type		
6	U208	IC	EUSY0262401	Micropak ,10 PIN,R/TP ,Dual Analog switch(Ron=0.4ohm@Vcc=2.7V), Pb Free		
6	U209	IC	EUSY0309801	Output capless audio subsystem with 3D ,24 PIN,R/TP ,NS subsystem audio amp		
6	U401	IC	EUSY0077701	SC70-5 ,5 PIN,R/TP ,1.8V Low Voltage Comparator with Rail-to-Rail Input, Pb Free		
6	U404	IC	EUSY0262401	Micropak ,10 PIN,R/TP ,Dual Analog switch(Ron=0.4ohm@Vcc=2.7V), Pb Free		
6	U405	IC	EUSY0251101	QFN ,16 PIN,R/TP ,Ultra Low Ron Dual DPDT Analog switch, Pb Free		
6	U501	IC	EUSY0274801	VQFN ,40 PIN,R/TP ,GPRS, EDGE TRANSCEIVER		
6	U502	PAM	SMPY0012301	dBm, %, A, dBc, dB, ,SMD ,		
6	VA202	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	VA203	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	VA204	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	VA205	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	VA401	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	VA402	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	VA403	VARISTOR	SEVY0003801	18 V, ,SMD ,		
6	VA404	VARISTOR	SEVY0003801	18 V, ,SMD ,		
6	VA405	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	VA406	VARISTOR	SEVY0003801	18 V, ,SMD ,		
6	VA407	VARISTOR	SEVY0003801	18 V, ,SMD ,		
6	VA408	VARISTOR	SEVY0003801	18 V, ,SMD ,		
6	VA409	VARISTOR	SEVY0003801	18 V, ,SMD ,		

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	X501	VCTCXO	EXSK0007301	26 MHz,2 PPM,10 pF,SMD ,3.2*2.5*0.9 ,2.5ppm at -20 to +75, AFC 0.5V to 2.5V, Supply 2.6V		
5	SAFD00	PCB ASSY,MAIN,SMT TOP	SAFD0077201			
6	C101	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C102	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C103	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C104	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C105	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C106	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C107	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C108	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C109	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C110	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C111	CAP,CERAMIC,CHIP	ECCH0000155	10 nF,16V,K,X7R,HD,1005,R/TP		
6	C112	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C113	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C114	CAP,CERAMIC,CHIP	ECCH0000155	10 nF,16V,K,X7R,HD,1005,R/TP		
6	C115	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C116	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C117	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C118	CAP,CERAMIC,CHIP	ECCH0000155	10 nF,16V,K,X7R,HD,1005,R/TP		
6	C119	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C120	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C121	CAP,CERAMIC,CHIP	ECCH0000155	10 nF,16V,K,X7R,HD,1005,R/TP		
6	C122	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C123	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C124	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C125	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C126	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C127	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C128	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C129	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C130	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C131	CAP,CHIP,MAKER	ECZH0001211	220 nF,10V ,Z ,Y5V ,HD ,1005 ,R/TP		
6	C132	CAP,CERAMIC,CHIP	ECCH0000115	22 pF,50V,J,NP0,TC,1005,R/TP		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	C133	CAP,CERAMIC,CHIP	ECCH0000115	22 pF,50V,J,NP0,TC,1005,R/TP		
6	C134	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C135	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C136	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C203	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C204	CAP,CERAMIC,CHIP	ECCH0006201	4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP		
6	C205	CAP,CERAMIC,CHIP	ECCH0006201	4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP		
6	C206	CAP,CERAMIC,CHIP	ECCH0006201	4.7 uF,6.3V ,K ,X5R ,TC ,1608 ,R/TP		
6	C207	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C208	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C209	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C210	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C211	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C212	CAP,CERAMIC,CHIP	ECCH0000143	1 nF,50V,K,X7R,HD,1005,R/TP		
6	C213	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C214	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C215	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C216	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C217	CAP,CERAMIC,CHIP	ECCH0000393	22 uF,6.3V ,M ,X5R ,HD ,2012 ,R/TP		
6	C218	CAP,CERAMIC,CHIP	ECCH0000393	22 uF,6.3V ,M ,X5R ,HD ,2012 ,R/TP		
6	C219	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C220	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C221	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C222	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C223	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C224	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C225	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C226	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C227	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C228	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C229	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C234	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C241	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C242	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	C243	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C246	CAP,CERAMIC,CHIP	ECCH0000198	2.2 uF,6.3V ,M ,X5R ,TC ,1005 ,R/TP		
6	C249	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C250	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C251	CAP,CERAMIC,CHIP	ECCH0000143	1 nF,50V,K,X7R,HD,1005,R/TP		
6	C301	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
6	C308	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C309	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C312	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
6	C316	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
6	C317	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
6	C318	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
6	C319	CAP,TANTAL,CHIP	ECTH0001902	10 uF,10V ,M ,L_ESR ,1608 ,R/TP		
6	C405	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C406	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C407	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C408	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C409	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C430	CAP,CHIP,MAKER	ECZH0000813	100 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	C432	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C433	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C434	CAP,CERAMIC,CHIP	ECCH0004904	1 uF,6.3V ,K ,X5R ,TC ,1005 ,R/TP		
6	C435	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C436	CAP,CERAMIC,CHIP	ECCH0000182	0.1 uF,10V ,K ,X5R ,HD ,1005 ,R/TP		
6	C437	CAP,CHIP,MAKER	ECZH0000826	27 pF,50V ,J ,NP0 ,TC ,1005 ,R/TP		
6	CN301	CONNECTOR,BOARD TO BOARD	ENBY0020402	60 PIN,0.4 mm,STRAIGHT ,AU ,STACKING HEIGHT 0.9 / SOCKET FOR KEYPAD TO MAIN		
6	CN302	CONNECTOR,BOARD TO BOARD	ENBY0020402	60 PIN,0.4 mm,STRAIGHT ,AU ,STACKING HEIGHT 0.9 / SOCKET FOR KEYPAD TO MAIN		
6	FB201	FILTER,BEAD,CHIP	SFBH0001003	220 ohm,2012 ,		
6	L201	INDUCTOR,SMD,POWER	ELCP0005104	10 uH,M ,3.8*3.8*1.8 ,R/TP ,power inductor/ 850mA		
6	L202	INDUCTOR,CHIP	ELCH0005009	100 nH,J ,1005 ,R/TP ,		
6	Q402	TR,BJT,NPN	EQBN0007101	EMT3 ,0.15 W,R/TP ,LOW FREQUENCY		
6	R101	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R102	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	R103	RES,CHIP,MAKER	ERHZ0000488	4.7 ohm,1/16W ,J ,1005 ,R/TP		
6	R105	RES,CHIP	ERHY0000132	22K ohm,1/16W,F,1005,R/TP		
6	R106	RES,CHIP,MAKER	ERHZ0000279	39 Kohm,1/16W ,F ,1005 ,R/TP		
6	R108	RES,CHIP,MAKER	ERHZ0000267	3300 ohm,1/16W ,F ,1005 ,R/TP		
6	R109	RES,CHIP,MAKER	ERHZ0000203	10 Kohm,1/16W ,F ,1005 ,R/TP		
6	R110	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R111	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R112	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
6	R113	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
6	R115	RES,CHIP,MAKER	ERHZ0000422	15 Kohm,1/16W ,J ,1005 ,R/TP		
6	R117	RES,CHIP	ERHY0003601	2700 ohm,1/16W ,J ,1005 ,R/TP		
6	R118	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R119	RES,CHIP	ERHY0003601	2700 ohm,1/16W ,J ,1005 ,R/TP		
6	R120	RES,CHIP,MAKER	ERHZ0000465	3300 ohm,1/16W ,J ,1005 ,R/TP		
6	R121	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
6	R122	RES,CHIP,MAKER	ERHZ0000441	22 ohm,1/16W ,J ,1005 ,R/TP		
6	R123	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R124	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R125	RES,CHIP,MAKER	ERHZ0000444	22 Kohm,1/16W ,J ,1005 ,R/TP		
6	R132	RES,CHIP,MAKER	ERHZ0000485	4700 ohm,1/16W ,J ,1005 ,R/TP		
6	R134	RES,CHIP,MAKER	ERHZ0000485	4700 ohm,1/16W ,J ,1005 ,R/TP		
6	R201	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R202	RES,CHIP,MAKER	ERHZ0000445	220 Kohm,1/16W ,J ,1005 ,R/TP		
6	R203	RES,CHIP,MAKER	ERHZ0000485	4700 ohm,1/16W ,J ,1005 ,R/TP		
6	R204	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R206	RES,CHIP,MAKER	ERHZ0000487	470 Kohm,1/16W ,J ,1005 ,R/TP		
6	R207	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R208	RES,CHIP	ERHY0000278	82K ohm,1/16W,J,1005,R/TP		
6	R209	RES,CHIP,MAKER	ERHZ0000493	51 Kohm,1/16W ,J ,1005 ,R/TP		
6	R210	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
6	R211	RES,CHIP,MAKER	ERHZ0000410	12 ohm,1/16W ,J ,1005 ,R/TP		
6	R212	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R213	RES,CHIP	ERHY0011901	47 mohm,1/4W ,F ,2012 ,R/TP		
6	R214	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	R215	RES,CHIP,MAKER	ERHZ0000443	2200 ohm,1/16W ,J ,1005 ,R/TP		
6	R216	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R217	RES,CHIP,MAKER	ERHZ0000279	39 Kohm,1/16W ,F ,1005 ,R/TP		
6	R218	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R221	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R222	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R224	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	R225	RES,CHIP,MAKER	ERHZ0000404	1 Kohm,1/16W ,J ,1005 ,R/TP		
6	R431	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R435	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R436	RES,CHIP,MAKER	ERHZ0000401	0 ohm,1/16W ,J ,1005 ,R/TP		
6	R438	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R439	RES,CHIP,MAKER	ERHZ0000486	47 Kohm,1/16W ,J ,1005 ,R/TP		
6	R440	RES,CHIP,MAKER	ERHZ0000405	10 Kohm,1/16W ,J ,1005 ,R/TP		
6	R441	RES,CHIP,MAKER	ERHZ0000406	100 Kohm,1/16W ,J ,1005 ,R/TP		
6	SPFY00	PCB,MAIN	SPFY0133001	FR-4 ,0.8 mm,STAGGERED-10 ,KE800 MAIN PCB		
6	U101	IC	EUSY0302101	BGA ,105 PIN,R/TP ,1G Nor+256MSDRAM, 1 8V I/O(Sibely)		
6	U102	IC	EUSY0246101	WCSP(0.23mm Large Bump) ,5 PIN,R/TP ,Single 2-input positive AND gate, Pb Free		
6	U103	IC	EUSY0274601	BGA ,293 PIN,R/TP ,EDGE BASE BAND S-GOLD2		
6	U201	IC	EUSY0077301	SC70-6 ,6 PIN,R/TP ,SPDT Analog switch		
6	U202	IC	EUSY0102802	Micropak ,8 PIN,R/TP ,Daul 2 input AND gate,		
6	U203	IC	EUSY0269101	PG-VQFN-48 ,48 PIN,R/TP ,PMIC, Pb Free		
6	U204	IC	EUSY0160401	SOT-23 ,3 PIN,R/TP ,DC MOTOR DRIVER / INTEGERATED RELAY		
6	U205	IC	EUSY0129503	2x2 mm MLPD ,3 PIN,R/TP ,Hall Effect Switch, Pb Free		
6	U206	IC	EUSY0286901	SOT23-5 ,5 PIN,R/TP ,2.5V Sense voltage(max), current monitor		
6	U207	IC	EUSY0254701	DFN 3*3*0.9 ,10 PIN,R/TP ,Charger IC, I Max 1A, Wall Adaptor/USB Charger		
6	U210	IC	EUSY0223008	HVSOF5 ,5 PIN,R/TP ,150mA,2.9V,LDO		
6	U211	IC	EUSY0232812	SON1612-6 ,6 PIN,R/TP ,2.8V, 150mA LDO		
6	U402	IC	EUSY0262401	Micropak ,10 PIN,R/TP ,Dual Analog switch(Ron=0.4ohm@Vcc=2.7V), Pb Free		
6	U406	IC	EUSY0303201	QFN ,24 PIN,R/TP ,FM Tuner Chip, No RDS, 4X4mm, Pb-Free		
6	U407	IC	EUSY0278501	SON5-P-0.50 ,5 PIN,R/TP ,INVERTER GATE, Pb Free		

10. EXPLODED VIEW & REPLACEMENT PART LIST

Level	Location No.	Description	Part Number	Specification	Color	Remark
6	VA201	VARISTOR	SEVY0003901	5.5 V, ,SMD ,480pF, 1005		
6	X101	X-TAL	EXXY0018701	32.768 KHz,20 PPM,12.5 pF,70 Kohm,SMD ,3.2*1.5*0.9 ,		

10.3 Accessory

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	Location No.	Description	Part Number	Specification	Color	Remark
3	MHBY00	HANDSTRAP	MHBY0003604		Without Color	
3	MPAC00	PACKING,ETC	MPAC0004202	Export Son 80-Phone Case	Without Color	
3	SBPP00	BATTERY PACK,LI-POLYMER	SBPP0020301	3.7 V,800 mAh,1 CELL,PRISMATIC ,KE800 FRABK, BATT, Europe Label, Pb-Free ,; ,3.7 ,800 ,0.2C (180mAh) ,PRISMATIC ,50x34x38 , ,BLACK ,Hardpack ,Europe Label	Black	78
3	SGDY00	DATA CABLE	SGDY0010901	LG-US03K ,18pin USB DataCable		
3	SGEY00	EAR PHONE/EAR MIKE SET	SGEY0004213	SON80,KG808,818CHINA ,SON80CHINA(R+VE)18P		
3	SSAD00	ADAPTOR,AC-DC	SSAD0021002	100-240V ,5060 Hz,4.8 V,0.9 A,CB & CE ,18pin plug		
Replacement		ADAPTOR,AC-DC	SSAD0021001	100-240V ,5060 Hz,4.8 V,0.9 A,CB & CE ,18pin plug		
Replacement		ADAPTOR,AC-DC	SSAD0021004	100-240V ,5060 Hz,4.8 V,0.9 A,CB & CE ,18pin plug		
Replacement		ADAPTOR,AC-DC	SSAD0021005	100-240V ,5060 Hz,4.8 V,0.9 A,CB & CE ,18pin plug		
Replacement		ADAPTOR,AC-DC	SSAD0021006	100-240V ,5060 Hz,4.8 V,0.9 A,CB & CE ,18pin plug		
Replacement		ADAPTOR,AC-DC	SSAD0021008	100-240V ,5060 Hz,4.8 V,0.9 A,CE&CB ,18pin Plug ,; , , , , , ,[empty] ,I/O CONNECTOR ,		

Note