

**SAMSUNG**

# **GSM TELEPHONE**

## **GT-S7070**

# ***SERVICE* Manual**

### **GSM TELEPHONE**



### **CONTENTS**

1. Safety Precautions
2. Specification
3. Product Function
4. Array course control
5. Exploded View and Parts list
6. MAIN Electrical Parts List
7. Block Diagrams
8. PCB Diagrams
9. Chart of Troubleshooting
10. Reference data
11. Disassembly and Assembly Instructions

**SAMSUNG  
ELECTRONICS**



GSPN (Global Service Partner Network)

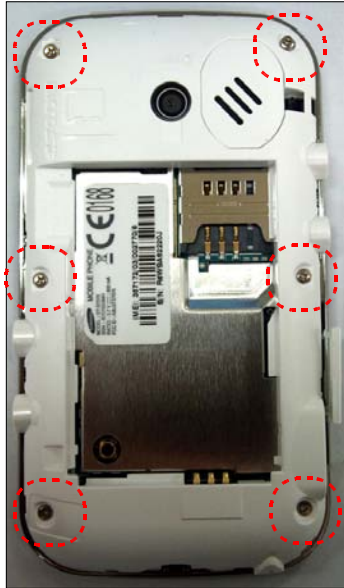
<b>Country</b>	<b>Web Site</b>
North America	service.samsungportal.com
Latin America	latin.samsungportal.com
CIS	cis.samsungportal.com
Europe	europe.samsungportal.com
China	china.samsungportal.com
Asia	asia.samsungportal.com
Mideast & Africa	mea.samsungportal.com

# 11. Disassembly and Assembly Instructions

## 11-1. Disassembly

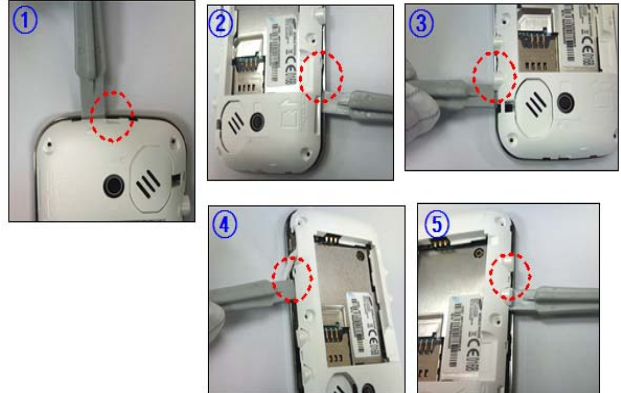
1

1) Disassemble REAR screw 6 points.



2

1) Separate the REAR from the FRONT ass'y  
( TOP → Right → Left → Bottom)



**※ Caution**

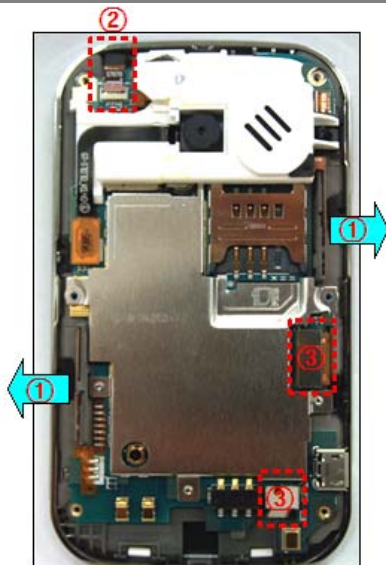
1) Be care of scratch and molding damage.

**※ Caution**

1) Be care of scratch and molding damage.

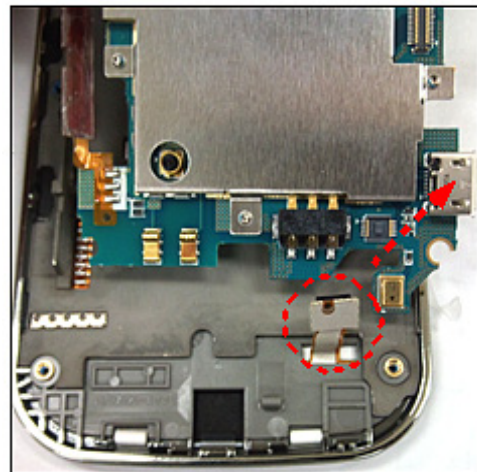
3

1) Disassemble the key FPCB from Front Rib.  
2) Disassemble the TSP FPCB from connector.  
3) Disassemble the Key and LCD connector.



4

1) Separate the PBA from the FRONT ass'y  
※ Lift to 45 degrees direction.



**※ Caution**

1) Be care of damage to TSP FPCB.

**※ Caution**

1) Be care of damage to KEY FPCB..

5

1) Separate the LCD Braket from the FRONT ass'y ( Right → Left )



TSP FPCB

※ Caution

1) Be care of damage to TSP FPCB.

6

1) Separate the LCD from the LCD Braket

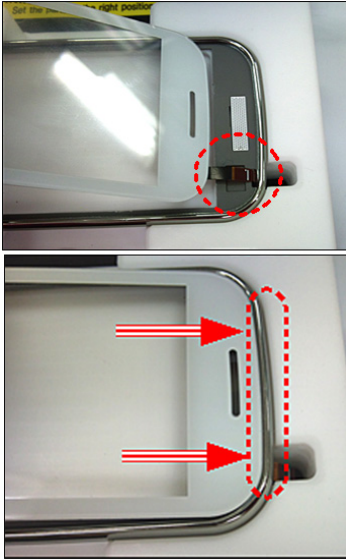


※ Caution

1) Be care of damage to LCD FPCB.

11-2. Assembly

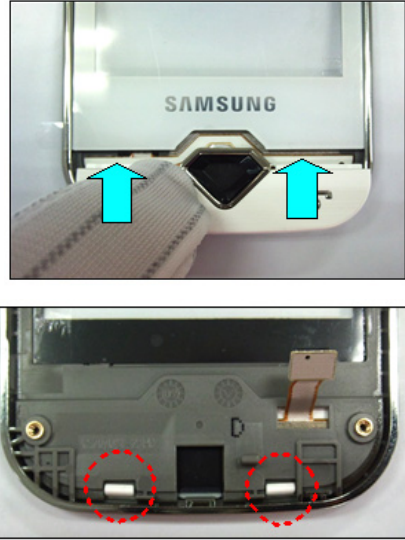
**1** 1) Assemble the TSP on the FRONT



**※ Caution**

- 1) Be care of scratch to TSP
- 2) Be care of damage to TSP FPCB.

**2** 1) Assemble the KEYPAD on the FRONT  
 ※ Confirm whether hook was combine properly



**※ Caution**

- 1) Be care of scratch to KEYPAD

**3** 1) Assemble the LCD module on the Bracket



**※ Caution**

- 1) Be care of damage to the LCD FPCB.

**4** 1) Assemble the LCD Braket on the FRONT

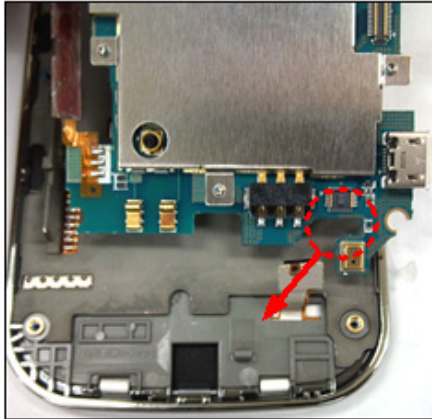


**※ Caution**

- 1) Be care of scratch and molding damage.
- 2) Be care of damage to the F-CPB.

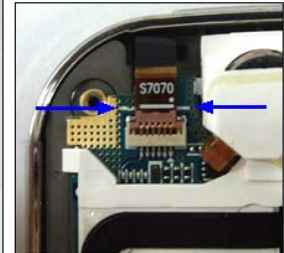
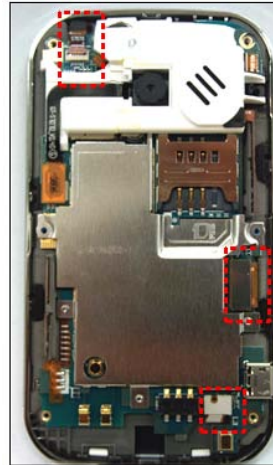
5

1) Be inserted to diagonal line direction so that key connector is located through PCB groove.



6

1) assemble the key connector.  
2) assemble the LCD connector.  
3) assemble the TSP FPCB from connector.



**※ Caution**

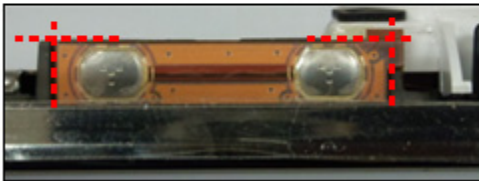
1) Be care of damage to KEY Connector FPCB.

**※ Caution**

1) Be care of damage to FPCB.  
2) Set and insert to insertion silky base line.

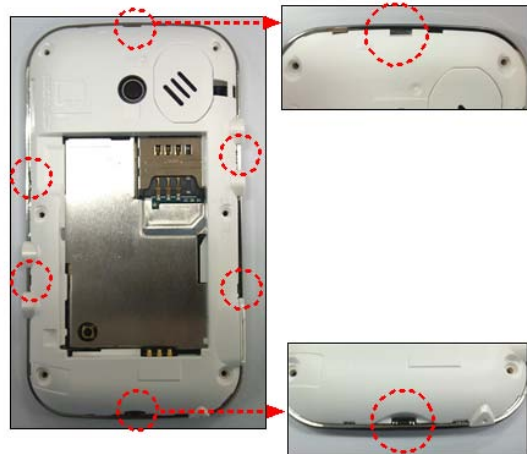
7

1) Attach FPCB on FRONT RIB surface.



8

1) Assemble the REAR to the FRONT ass'y ( REAR TOP → Middle → Bottom)  
2) Confirm hook conclusion status..



**※ Caution**

1) Be care of damage to FPCB.  
2) Set and attach to base line for attachment.

**※ Caution**

1) Be care of scratch and molding damage.

9

1) Assemble REAR screw 6 points.



**※ Caution**

- 1) Be care of scratch and molding damage.
- 2) Check the torque Spec. (1.2 Kgf.Cm)

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## 10. Reference data

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### Reference Abbreviate

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



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## 3. Product Function

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### Main Function

- 101 x 54.8 x 13.4 mm
- 3 Mega Pixel Camera
- 2.8" 16M QVGA TFT(C Type FULL TOUCH)
- USB v2.0 High-speed, Bluetooth v2.1
- microUSB
- Tri Band(900/1800/1900)
- FM Radio w/RDS + Recording
- SMS/MMS/EMS (OMA v1.2)
- WAP 2.0 Browser
- MP3/AAC/AAC+/EAAC+/WMA
- MicroSD Card Support

## 6. MAIN Electrical Parts List

SEC CODE	Design LOC	Description
0403-001547	ZD304	DIODE-ZENER
0406-001254	ZD305	DIODE-TVS
0406-001254	ZD306	DIODE-TVS
0406-001254	ZD307	DIODE-TVS
0406-001254	ZD308	DIODE-TVS
0406-001254	ZD400	DIODE-TVS
0406-001254	ZD401	DIODE-TVS
0406-001254	ZD407	DIODE-TVS
0406-001254	ZD408	DIODE-TVS
0406-001254	ZD409	DIODE-TVS
0406-001254	ZD410	DIODE-TVS
0406-001254	ZD411	DIODE-TVS
0406-001254	ZD412	DIODE-TVS
0406-001254	ZD413	DIODE-TVS
0406-001254	ZD414	DIODE-TVS
0406-001256	U402	DIODE-TVS
0406-001256	U403	DIODE-TVS
0406-001256	U404	DIODE-TVS
0406-001261	ZD402	DIODE-TVS
0406-001267	ZD403	DIODE-TVS
0406-001286	ZD300	DIODE-TVS
0406-001293	ZD415	DIODE-TVS
0406-001369	U405	DIODE-TVS
0502-001322	Q300	TR-POWER
0505-001518	Q200	FET-SILICON
0801-003026	U302	IC-CMOS LOGIC
0801-003130	U200	IC-CMOS LOGIC
1001-001585	U400	IC-ANALOG MULTIPLEX
1108-000296	U201	IC-MCP
1201-002494	U303	IC-AUDIO AMP
1201-002932	U406	IC-AUDIO AMP
1201-002943	U101	IC-POWER AMP
1203-004604	U401	IC-DC/DC CONVERTER
1203-005562	U300	IC-POWER SUPERVISOR
1203-005852	U301	IC-MULTI REG.
1204-002924	U102	IC-TUNER

SEC CODE	Design LOC	Description
1205-003754	U103	IC-BLUETOOTH
1205-003760	UCP200	IC-MODEM
1209-001817	U304	IC-SENSOR
1404-001221	VR200	THERMISTOR-NTC
2007-000137	R106	R-CHIP
2007-000137	R108	R-CHIP
2007-000137	R403	R-CHIP
2007-000138	R207	R-CHIP
2007-000138	R314	R-CHIP
2007-000140	R104	R-CHIP
2007-000140	R105	R-CHIP
2007-000140	R309	R-CHIP
2007-000141	R114	R-CHIP
2007-000141	R202	R-CHIP
2007-000141	R203	R-CHIP
2007-000143	R112	R-CHIP
2007-000143	R113	R-CHIP
2007-000143	R204	R-CHIP
2007-000144	R208	R-CHIP
2007-000144	R209	R-CHIP
2007-000144	R210	R-CHIP
2007-000144	R211	R-CHIP
2007-000144	R302	R-CHIP
2007-000148	R308	R-CHIP
2007-000157	R300	R-CHIP
2007-000157	R301	R-CHIP
2007-000157	R303	R-CHIP
2007-000157	R304	R-CHIP
2007-000159	R413	R-CHIP
2007-000162	R107	R-CHIP
2007-000162	R109	R-CHIP
2007-000162	R220	R-CHIP
2007-000162	R321	R-CHIP
2007-000162	R322	R-CHIP
2007-000162	R420	R-CHIP
2007-000165	R305	R-CHIP

SEC CODE	Design LOC	Description
2007-000170	R212	R-CHIP
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2007-001319	R217	R-CHIP
2007-001319	R218	R-CHIP
2007-001319	R312	R-CHIP
2007-001319	R315	R-CHIP
2007-001319	R316	R-CHIP
2007-001339	R214	R-CHIP
2007-002796	R400	R-CHIP
2007-003006	R405	R-CHIP
2007-003006	R406	R-CHIP
2007-003014	R206	R-CHIP
2007-003018	R100	R-CHIP
2007-003018	R103	R-CHIP
2007-007021	R213	R-CHIP
2007-007100	R310	R-CHIP
2007-007107	R317	R-CHIP
2007-007107	R325	R-CHIP
2007-007132	R115	R-CHIP
2007-007155	R110	R-CHIP
2007-007312	R215	R-CHIP
2007-007315	R221	R-CHIP
2007-007875	R323	R-CHIP
2007-007875	R324	R-CHIP
2007-007981	R200	R-CHIP
2007-007981	R201	R-CHIP
2007-008275	R311	R-CHIP
2007-008401	R205	R-CHIP
2007-010071	R306	R-CHIP
2203-000233	C117	C-CER,CHIP
2203-000233	C233	C-CER,CHIP
2203-000233	C305	C-CER,CHIP
2203-000254	C113	C-CER,CHIP
2203-000254	C115	C-CER,CHIP
2203-000254	C116	C-CER,CHIP
2203-000254	C221	C-CER,CHIP

SEC CODE	Design LOC	Description
2203-000254	C232	C-CER,CHIP
2203-000254	C312	C-CER,CHIP
2203-000254	C343	C-CER,CHIP
2203-000278	C111	C-CER,CHIP
2203-000278	C114	C-CER,CHIP
2203-000386	C419	C-CER,CHIP
2203-000386	C420	C-CER,CHIP
2203-000386	C423	C-CER,CHIP
2203-000386	C424	C-CER,CHIP
2203-000386	C425	C-CER,CHIP
2203-000386	C426	C-CER,CHIP
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2203-000489	C347	C-CER,CHIP
2203-000679	C228	C-CER,CHIP
2203-000812	C103	C-CER,CHIP
2203-000812	C106	C-CER,CHIP
2203-000812	C107	C-CER,CHIP
2203-000812	C109	C-CER,CHIP
2203-000812	C335	C-CER,CHIP
2203-000812	C400	C-CER,CHIP
2203-000812	C401	C-CER,CHIP
2203-000812	C402	C-CER,CHIP
2203-000812	C404	C-CER,CHIP
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2203-000812	C451	C-CER,CHIP
2203-000854	C230	C-CER,CHIP
2203-000854	C409	C-CER,CHIP

SEC CODE	Design LOC	Description
2203-000995	C204	C-CER,CHIP
2203-000995	C215	C-CER,CHIP
2203-000995	C229	C-CER,CHIP
2203-001101	C222	C-CER,CHIP
2203-001221	C108	C-CER,CHIP
2203-002668	C101	C-CER,CHIP
2203-003054	C446	C-CER,CHIP
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2203-005057	C100	C-CER,CHIP
2203-005234	C234	C-CER,CHIP
2203-005968	C430	C-CER,CHIP
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2203-006399	C412	C-CER,CHIP
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2203-006841	C445	C-CER,CHIP

SEC CODE	Design LOC	Description
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2203-006872	C223	C-CER,CHIP
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2203-006872	C319	C-CER,CHIP
2203-006872	C320	C-CER,CHIP
2203-006872	C321	C-CER,CHIP
2203-006872	C323	C-CER,CHIP
2203-006872	C324	C-CER,CHIP
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2203-006872	C326	C-CER,CHIP
2203-006872	C327	C-CER,CHIP
2203-007270	C450	C-CER,CHIP
2203-007271	C403	C-CER,CHIP
2203-007271	C428	C-CER,CHIP
2203-007271	C440	C-CER,CHIP
2203-007279	C105	C-CER,CHIP
2203-007279	C300	C-CER,CHIP
2404-001377	TA400	C-TA,CHIP
2404-001474	TA402	C-TA,CHIP
2409-001172	M300	C-EDL
2703-001178	L100	INDUCTOR-SMD
2703-001178	L105	INDUCTOR-SMD
2703-001726	L116	INDUCTOR-SMD
2703-001726	L118	INDUCTOR-SMD
2703-001726	L201	INDUCTOR-SMD
2703-001729	L124	INDUCTOR-SMD
2703-001748	L117	INDUCTOR-SMD



SEC CODE	Design LOC	Description
2703-001748	L120	INDUCTOR-SMD
2703-001749	L203	INDUCTOR-SMD
2703-001938	L408	INDUCTOR-SMD
2703-001938	L409	INDUCTOR-SMD
2703-001938	L410	INDUCTOR-SMD
2703-001938	L411	INDUCTOR-SMD
2703-002199	L102	INDUCTOR-SMD
2703-002199	L104	INDUCTOR-SMD
2703-002203	L107	INDUCTOR-SMD
2703-002203	L109	INDUCTOR-SMD
2703-002203	L125	INDUCTOR-SMD
2703-002208	L106	INDUCTOR-SMD
2703-002208	L110	INDUCTOR-SMD
2703-002308	L400	INDUCTOR-SMD
2703-002308	L401	INDUCTOR-SMD
2703-002314	L103	INDUCTOR-SMD
2703-003534	L402	INDUCTOR-SMD
2703-003545	C307	INDUCTOR-SMD
2703-003545	C313	INDUCTOR-SMD
2801-004373	OSC300	CRYSTAL-SMD
2801-004815	OSC200	CRYSTAL-SMD
2901-001462	F404	FILTER-EMI SMD
2901-001463	F401	FILTER-EMI SMD
2901-001469	F402	FILTER-EMI/ESD
2901-001469	F403	FILTER-EMI/ESD
2904-001912	F100	FILTER-SAW
2904-001913	F101	FILTER-SAW
2909-001312	F102	FILTER-LC
3003-001136	MIC400	MIC MEMS
3301-001659	L122	BEAD-SMD
3301-001659	L200	BEAD-SMD
3301-001659	L202	BEAD-SMD
3301-001812	L121	BEAD-SMD
3301-001885	L403	BEAD-SMD
3301-001885	L404	BEAD-SMD
3301-001885	L405	BEAD-SMD

SEC CODE	Design LOC	Description
3301-001885	L406	BEAD-SMD
3301-001885	L407	BEAD-SMD
3301-001912	L123	BEAD-SMD
3301-001917	L412	BEAD-SMD
3301-001917	L413	BEAD-SMD
3301-001986	L414	BEAD-SMD
3705-001503	RFS100	CONNECTOR-COAXIAL
3708-001947	SLC300	CONNECTOR-FPC/FFC/PIC
3708-002015	HDC400	CONNECTOR-FPC/FFC/PIC
3709-001488	SIM300	CONNECTOR-CARD EDGE
3709-001575	SD_300	CONNECTOR-CARD EDGE
3711-006277	HEA400	HEADER-BOARD TO BOARD
3711-006405	HEC400	HEADER-BOARD TO BOARD
3711-006808	BTC300	HEADER-BATTERY
3711-006865	HEA401	HEADER-BOARD TO BOARD
3722-002840	IFC400	JACK-MINI USB
4202-001513	ANT102	ANTENNA-CHIP
GH41-02897A		PCB MAIN-GTS7070
GH70-03349A	SC100	IPR SHIELD-CAN CLIP
GH70-03349A	SC102	IPR SHIELD-CAN CLIP
GH70-03349A	SC103	IPR SHIELD-CAN CLIP
GH71-08426A	ANT100	NPR CONTACT-ANTENNA
GH71-08426A	ANT101	NPR CONTACT-ANTENNA
GH80-03320A	R327	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R328	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R404	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R407	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R410	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R415	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R416	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R421	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R422	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03320A	R423	SOLDER-CREAM/SMT KOREA(FREE)
GH80-03321A	R313	SOLDER-CREAM/DHDMR(FREE)
GH80-03321A	R318	SOLDER-CREAM/DHDMR(FREE)
GH80-03321A	R319	SOLDER-CREAM/DHDMR(FREE)

SEC CODE	Design LOC	Description
GH80-03321A	R320	SOLDER-CREAM/DHDMR(FREE)
GH80-03321A	R417	SOLDER-CREAM/DHDMR(FREE)
GH80-03321A	R418	SOLDER-CREAM/DHDMR(FREE)
GH80-03321A	R419	SOLDER-CREAM/DHDMR(FREE)
GH80-03321A	R426	SOLDER-CREAM/DHDMR(FREE)
GH80-03321A	R427	SOLDER-CREAM/DHDMR(FREE)

Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

**5-2. Cellular phone Parts list**

Design LOC		Description	SEC CODE
QCR03		SCREW-MACHINE	6001-001811
QCR92		SCREW-MACHINE	6001-002261
QBA01		INNER BATTERY PACK-AB463651BU,960MAH	GH43-03216A
QVK01		KEY FPCB-VOLUME KEY(GTS7070)	GH59-08618A
QVK02		KEY FPCB-CAMERA KEY(GTS7070)	GH59-08620A
QME03		TOUCH/PANEL-EU GTS7070	GH59-08636A
QSP01		MODULE-SPK/MOT/RCV,GTS7070	GH59-08648A
QMP01		A/S ASSY-PBA MAIN,GT-S7070,XEB,EU,SVC	GH82-04434A
QLC01		ASSY LCD-2.8" QVGA GT-S7070 ASSY	GH96-04253A
QCA01		ASSY CAMERA-GTS7070 3M	GH96-04260A
QBC00		ASSY CASE-BATTERY	GH98-14879A
QKP01		ASSY KEYPAD-MAIN	GH98-14882A
QSH01		ASSY COVER-SHIELD CAN	GH98-14883A
QLB01		ASSY CASE-LCD BRACKET	GH98-15781A
QFR01		ASSY CASE-FRONT	GH98-14881A
	QME01	KEY FPCB-MAIN KEY(GTS7070)	GH59-08619A
QRE01		ASSY CASE-REAR	GH98-14880A
	QAN02	INTENNA-MAIN,GTS7070	GH42-02303A
	QCK01	PMO KEY-CAM HOLD	GH72-56367A
	QCW01	PMO WINDOW-CAMERA	GH72-56368A
	QRF06	PMO COVER-USB	GH72-56372A
	QVO01	PMO KEY-VOLUME	GH72-56378A
	QMI03	ASSY CASE-MIC HOLDER	GH98-15782A

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# 1. Mesures de sécurité

---

## 1-1. Mesures de précaution pour la réparation

- Procédez à la réparation et aux réglages fins dans une cabine isolée. Soyez prudent lors du réglage ou du test, car ce téléphone mobile est sensible aux interférences (bruit RF).
- Soyez vigilant lors de l'utilisation d'un objet ou d'un outil magnétique, car les pièces sont sensibles aux forces magnétiques.
- Démontez le téléphone à l'aide d'un tournevis standard pour ne pas abîmer les vis.
- Prenez la mesure du niveau à l'aide d'un fil torsadé épais.  
La faible résistance du fil torsadé épais permet de limiter les erreurs de mesure.
- Pour éviter tout danger de court-circuit (surtension, pièces qui s'enflamment, etc.) lors de la réparation de la carte, procédez à la réparation du téléphone après avoir utilisé le kit de test séparément.
- Soyez prudent lors de la soudure, car la carte est très petite et sensible à la chaleur.
- Veillez à effectuer le réglage de marche/arrêt lorsque vous utilisez le cordon d'alimentation CA, car il est dangereux de réparer le chargeur de batterie lors du réglage du connecteur et de la carte de marche/arrêt (lorsque le chargeur est démonté).
- Veillez à utiliser uniquement les pièces de rechange prévues dans le système SEC.  
Dans le cas contraire, le technicien sollicité ne sera pas tenu pour responsable.

## 1-2. Mesures de précaution contre les décharges électrostatiques

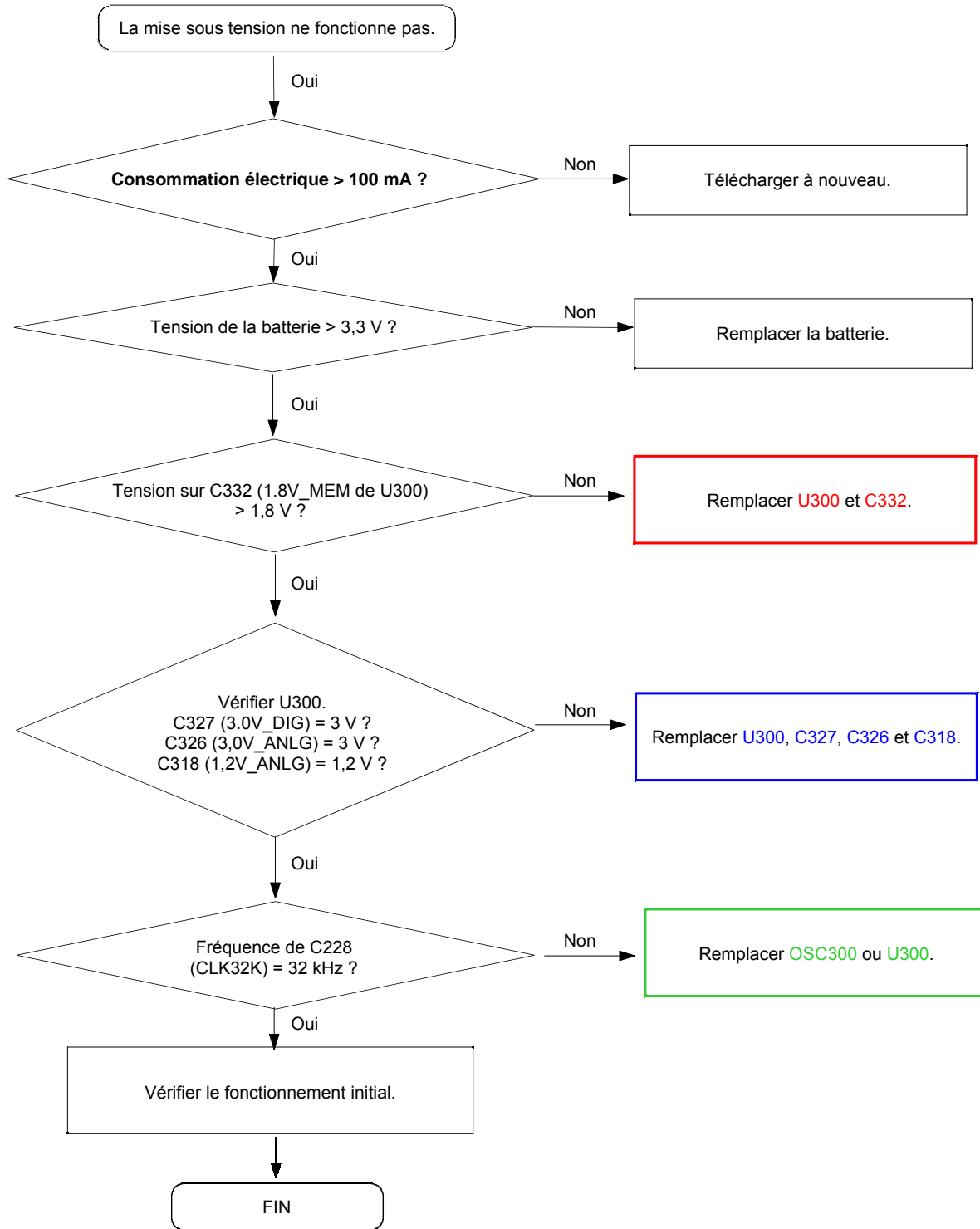
Les semi-conducteurs sont sensibles à l'électricité statique. Il s'agit notamment des circuits imprimés, de la puce BGA, etc. Veuillez lire les précautions ci-dessous.

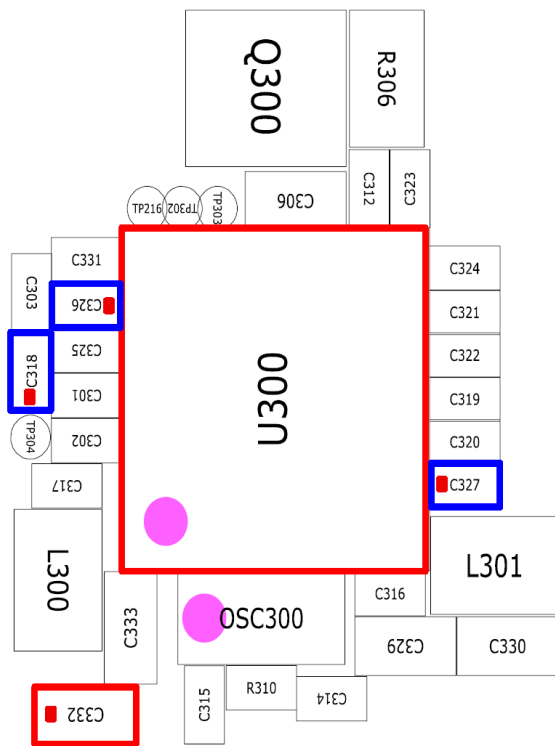
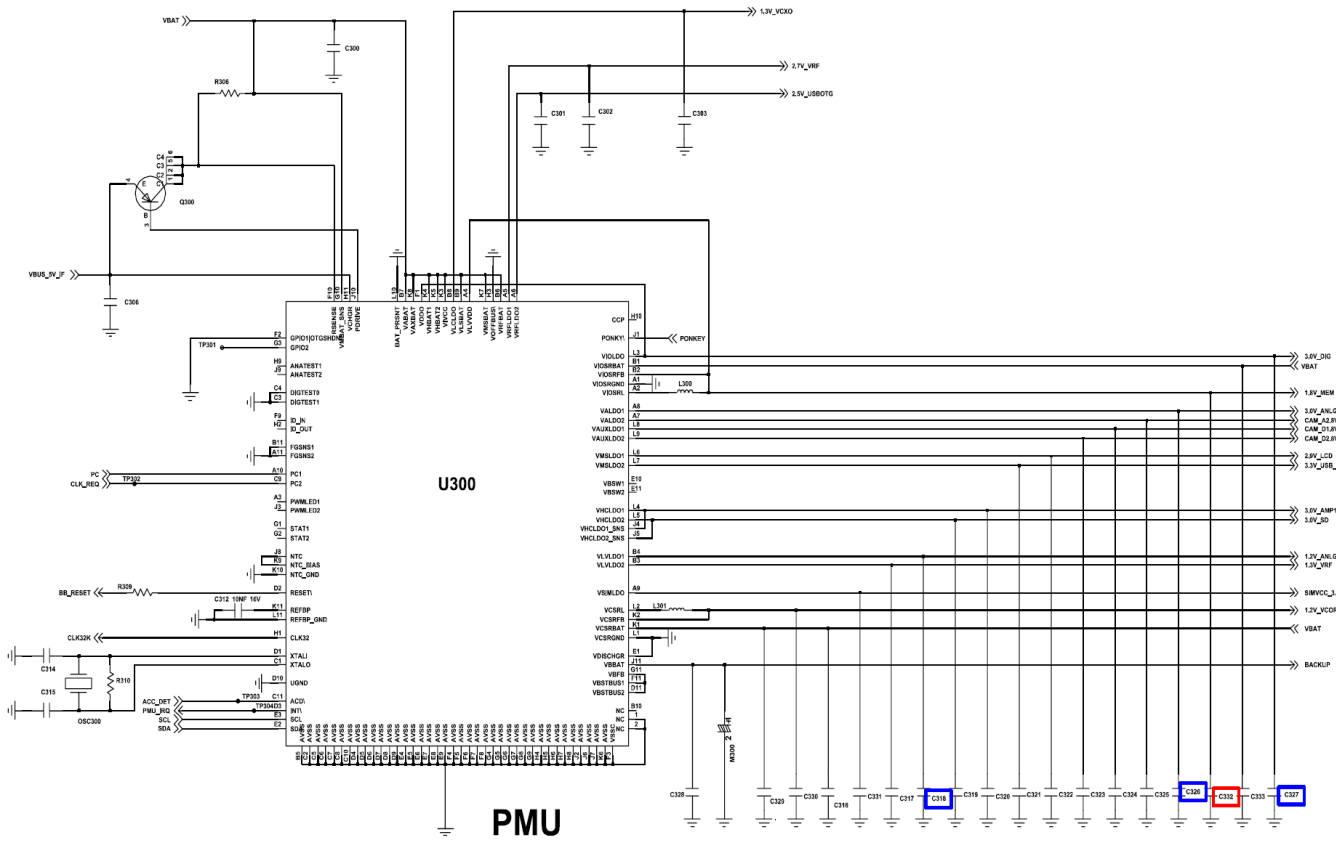
Vous pouvez éviter les dégâts occasionnés par l'électricité statique.

- Veillez à vous décharger de l'électricité statique présente sur vous avant de toucher un semi-conducteur ou des pièces comportant un semi-conducteur. Pour cela, touchez un élément mis à la terre ou portez un bracelet antistatique.
- Pour connecter ou déconnecter un appareil sensible aux décharges électrostatiques, utilisez du métal de soudure mis à la terre.
- Utilisez un outil de suppression de soudure pour arrêter l'électricité statique, sans quoi les appareils qui y sont sensibles risquent d'être endommagés.
- Veillez à ne pas déballer l'appareil tant que vous n'avez pas pris de mesures de précaution contre les décharges électrostatiques. La plupart des appareils sensibles aux décharges électrostatiques sont emballés dans des boîtes en aluminium (conducteur) pour les protéger de l'électricité statique.
- Veillez à maintenir le contact électrique entre l'appareil sensible aux décharges électrostatiques et l'environnement de réglage jusqu'à ce que l'appareil soit entièrement connecté sur place ou à une carte de circuit imprimé.

# 9. Recherche des pannes

## 9-1. Mise sous tension



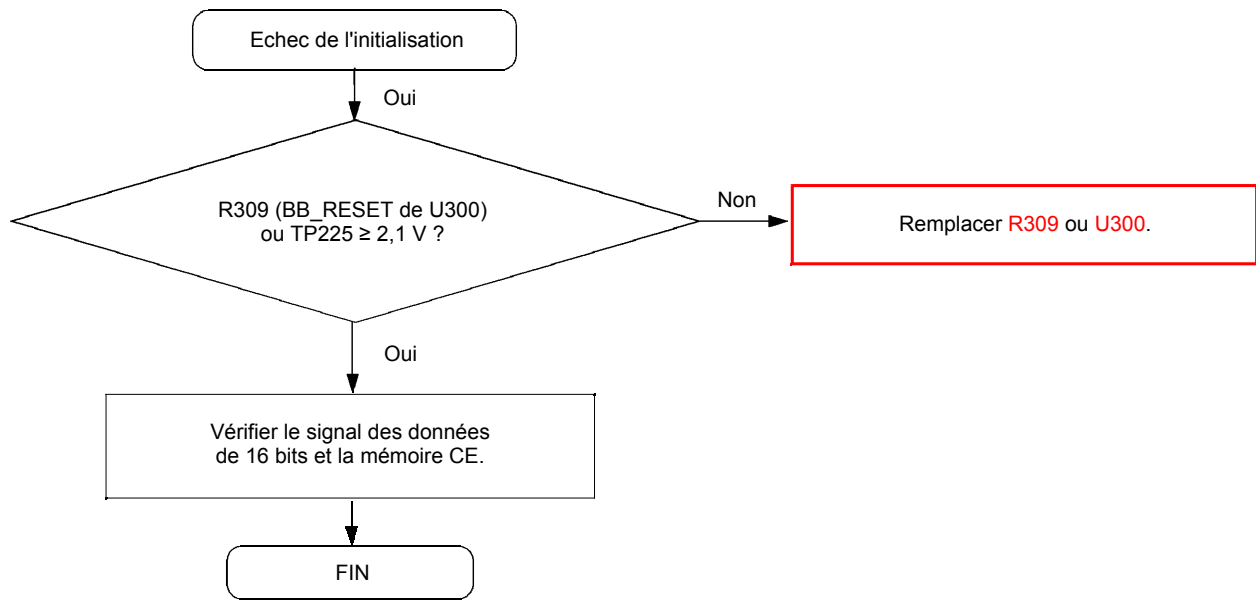


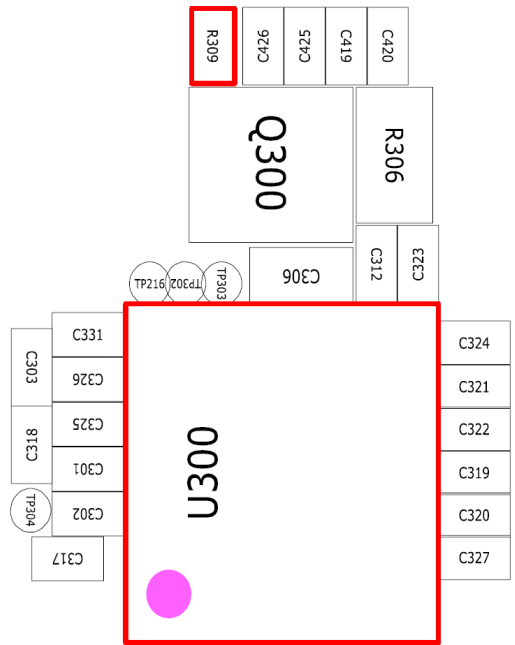
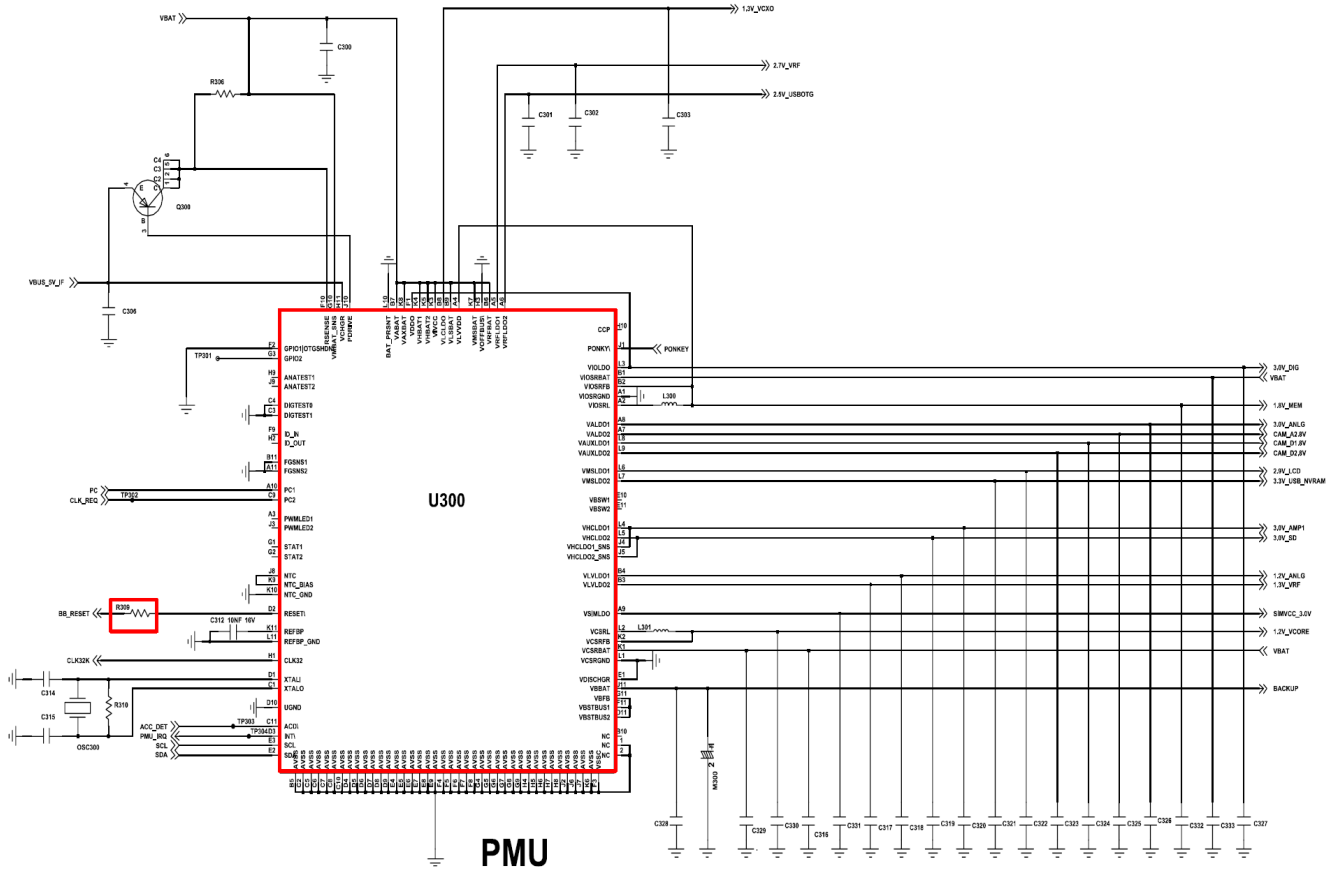




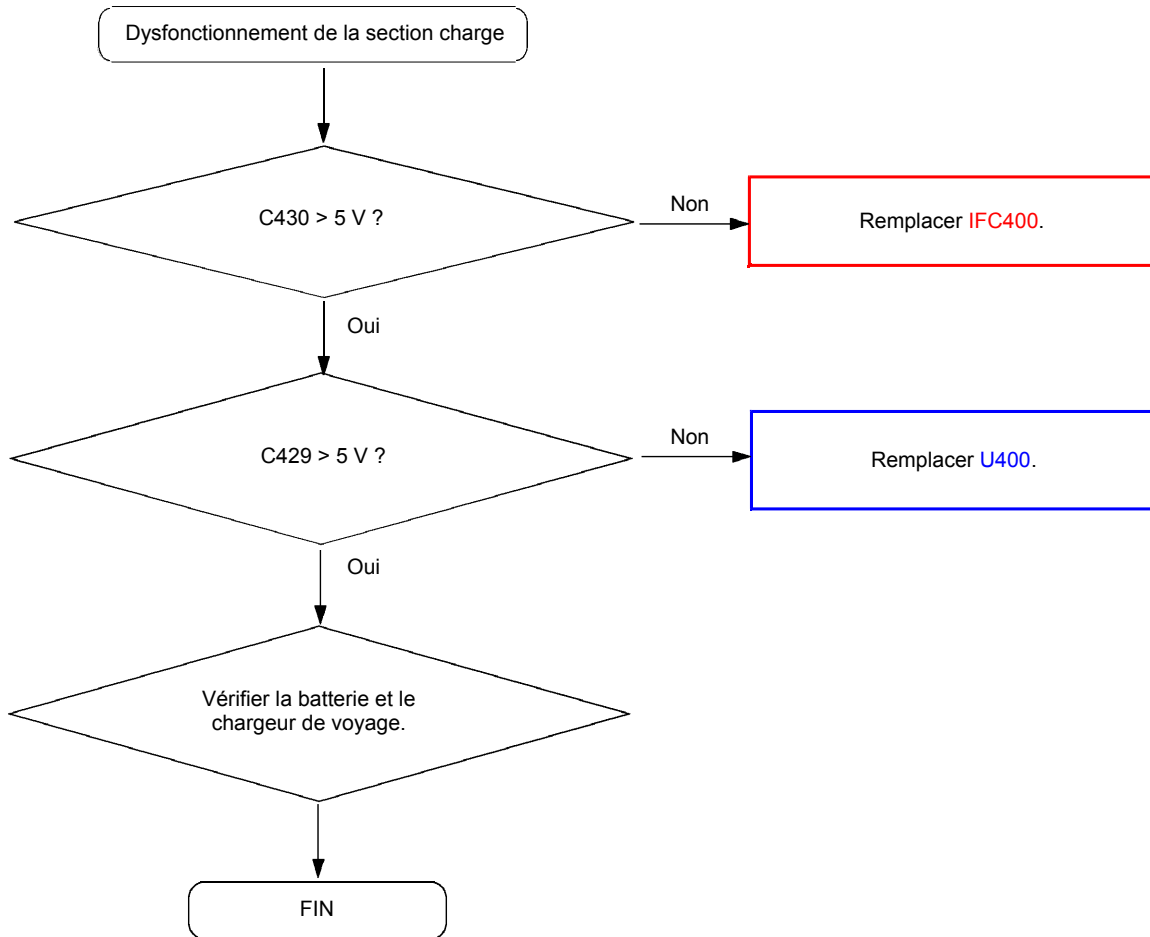
<Horloge 32 kHz>

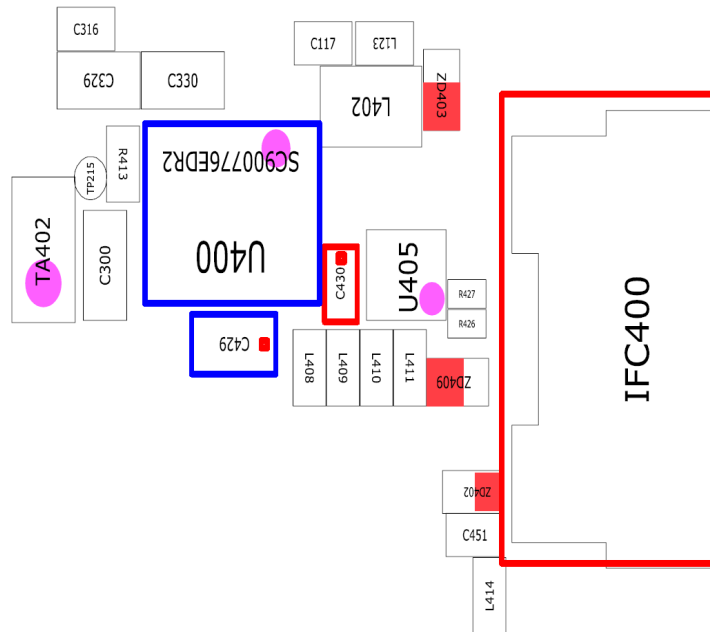
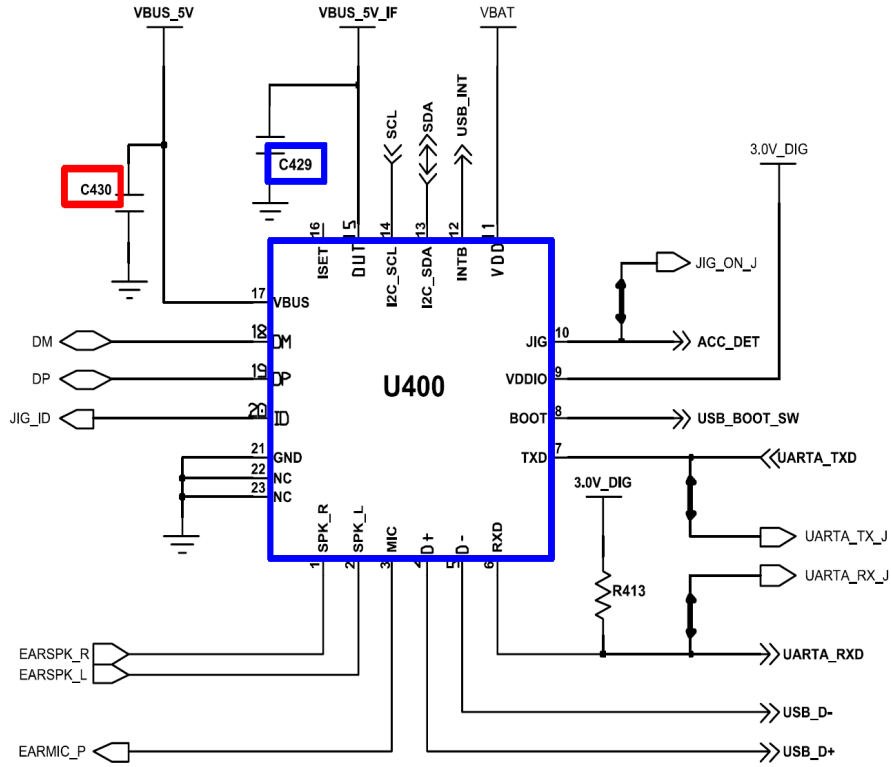
## 9-2. Initialisation



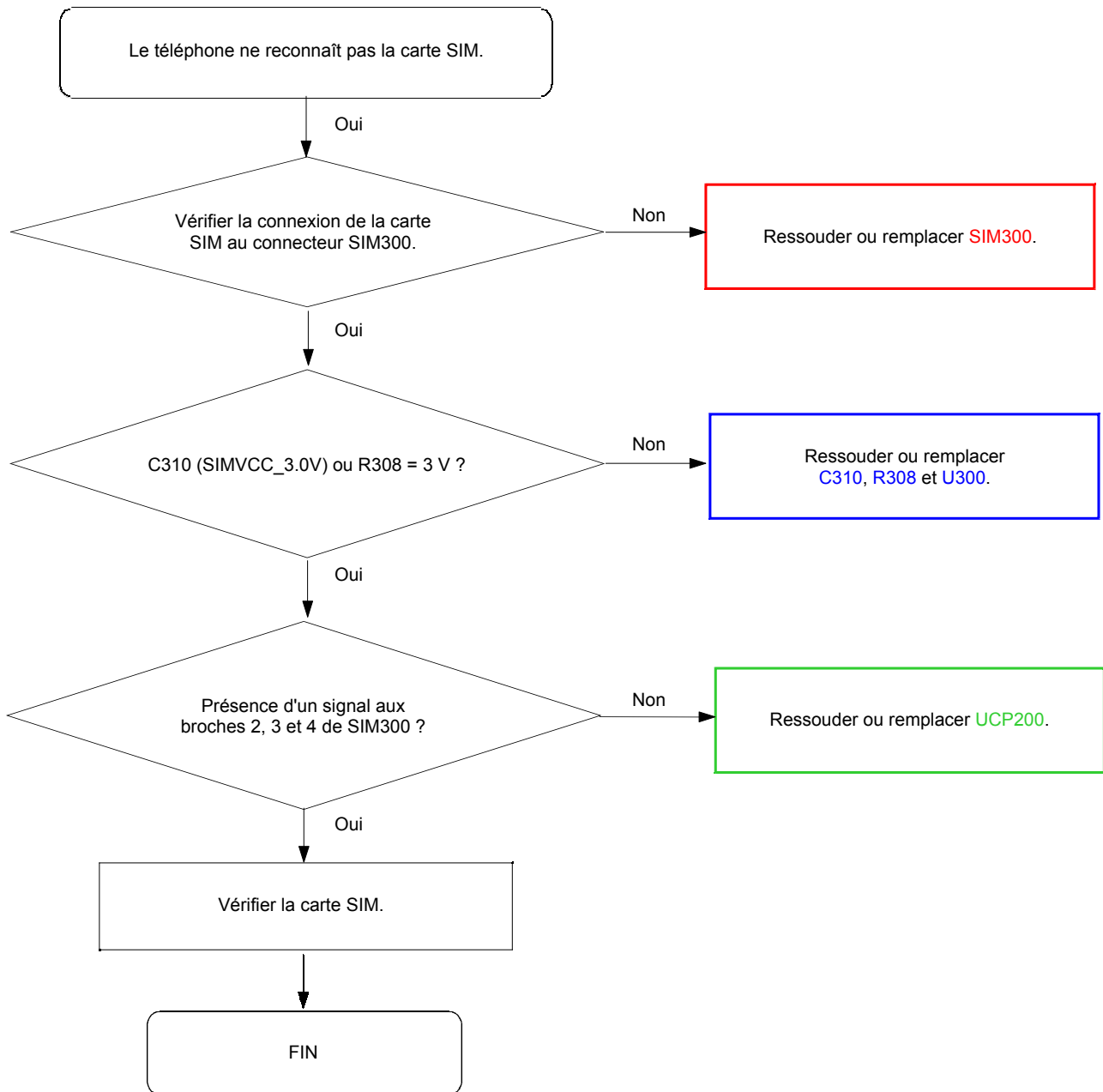


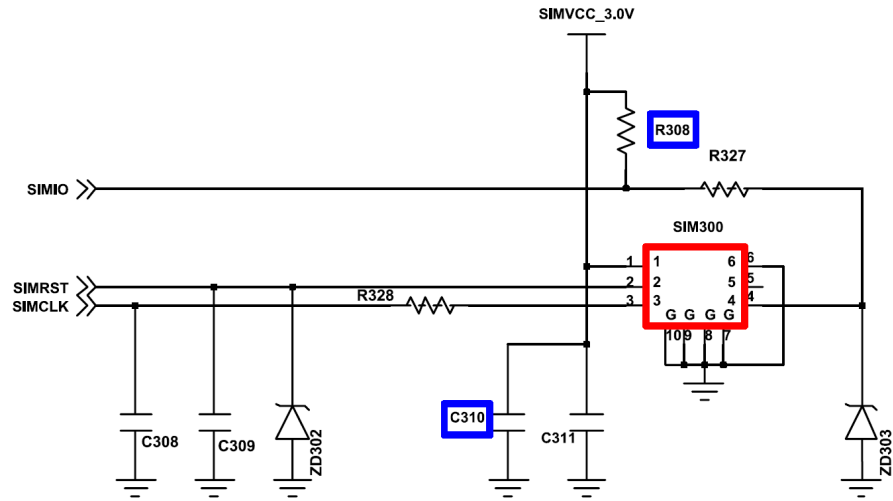
### 9-3. Section charge



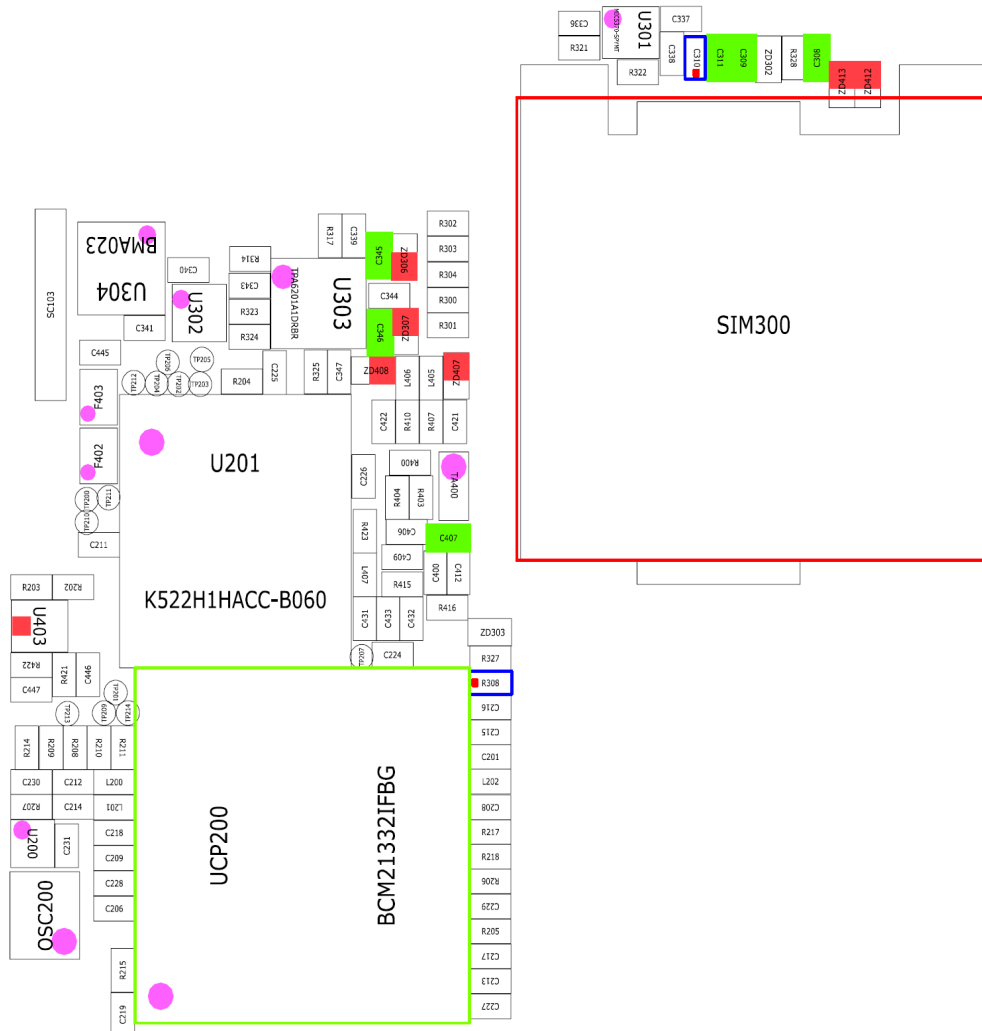


## 9-4. Section SIM

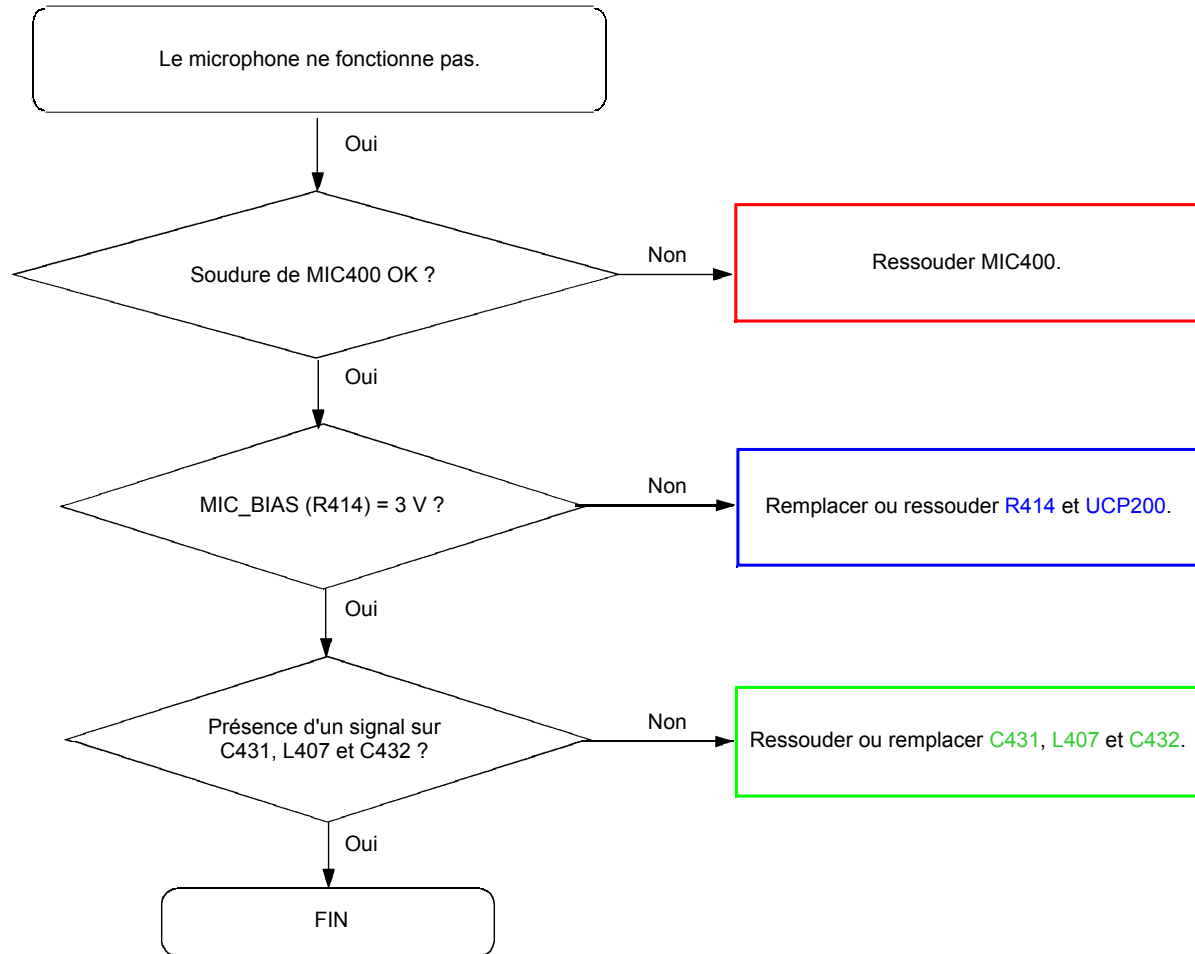




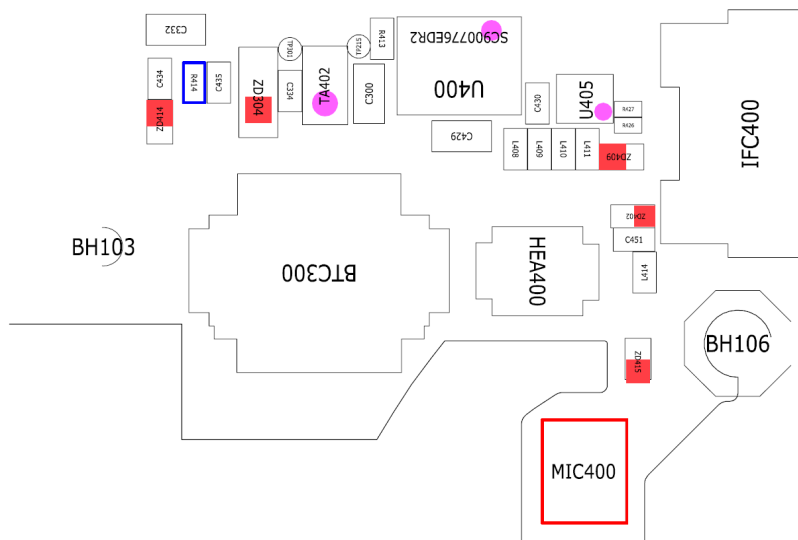
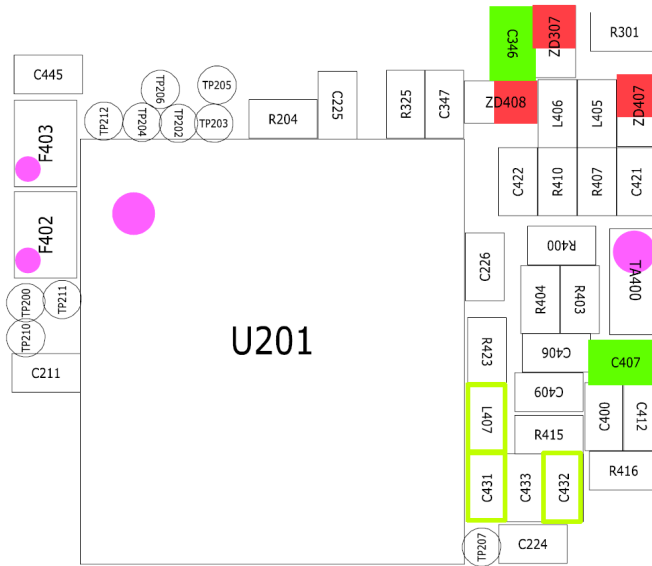
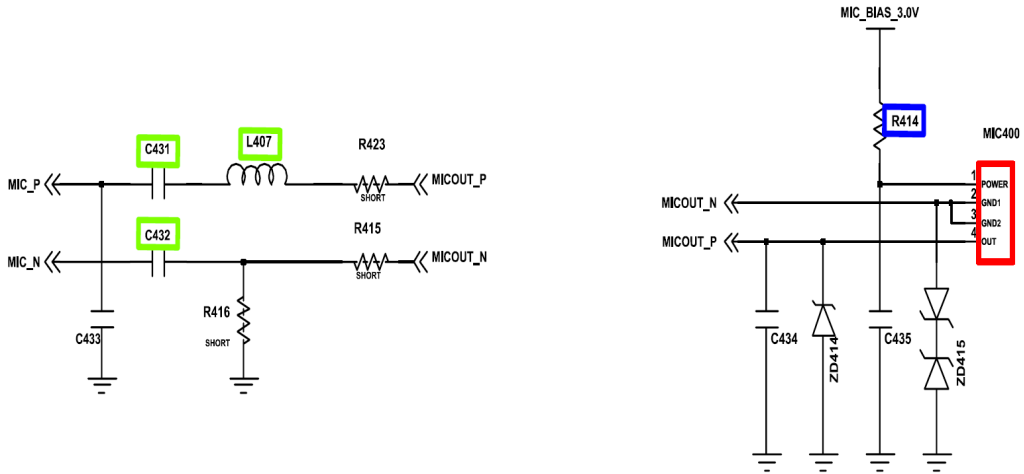
# CONNECTEUR SIM



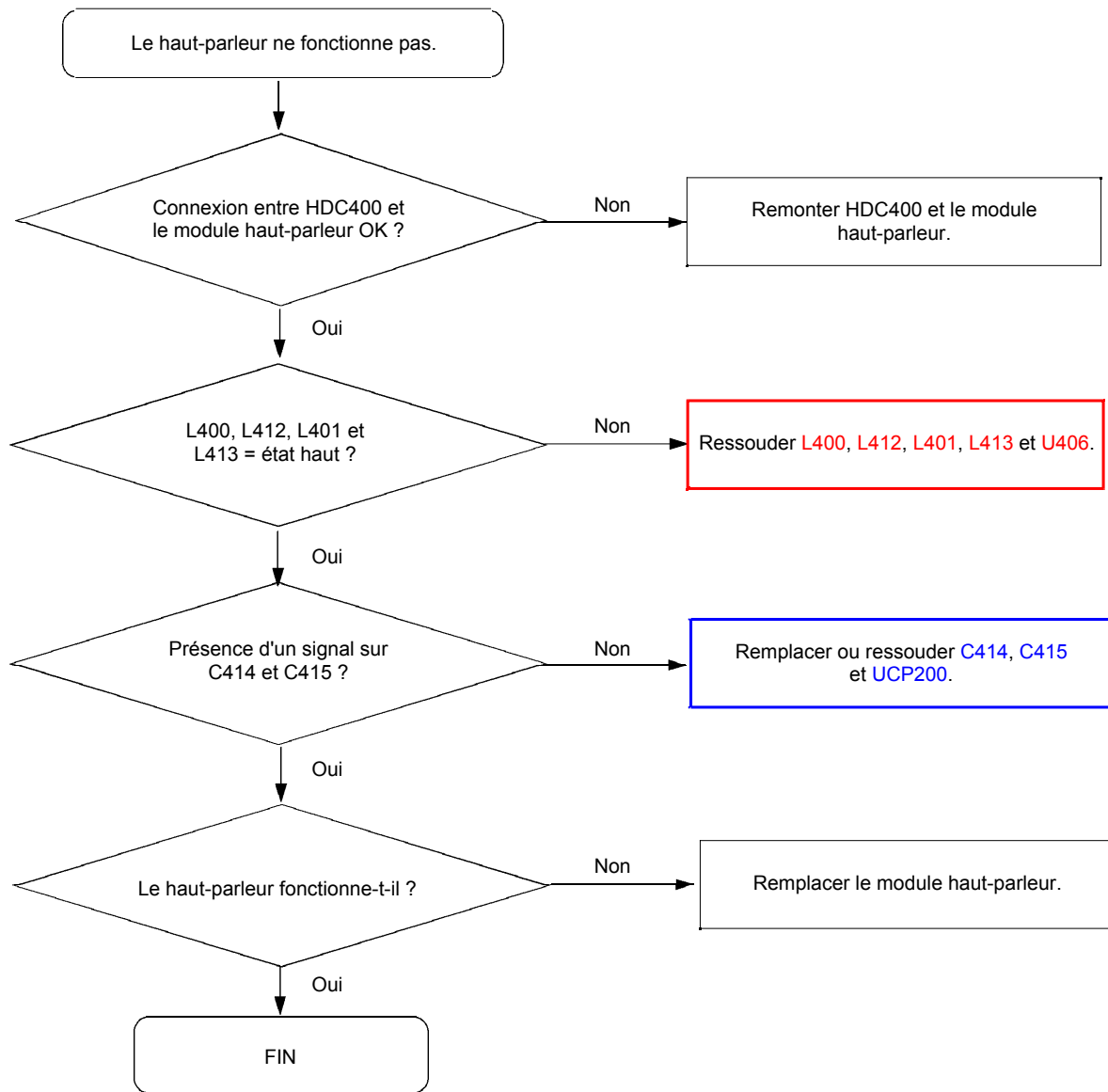
## 9-5. Section microphone

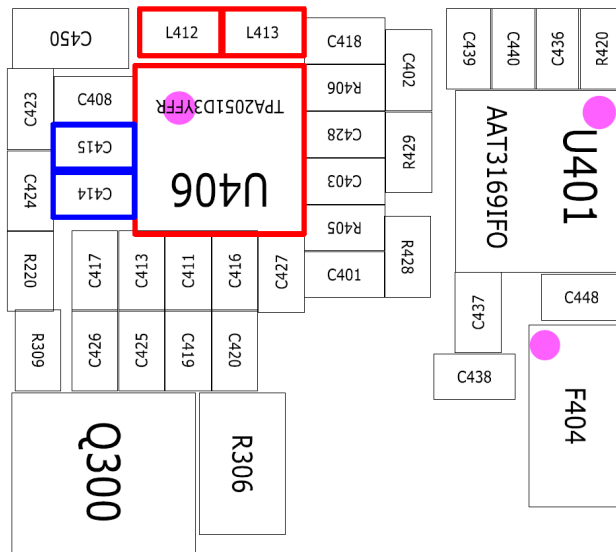
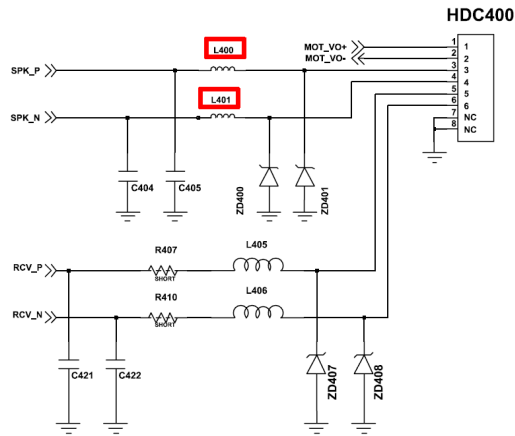
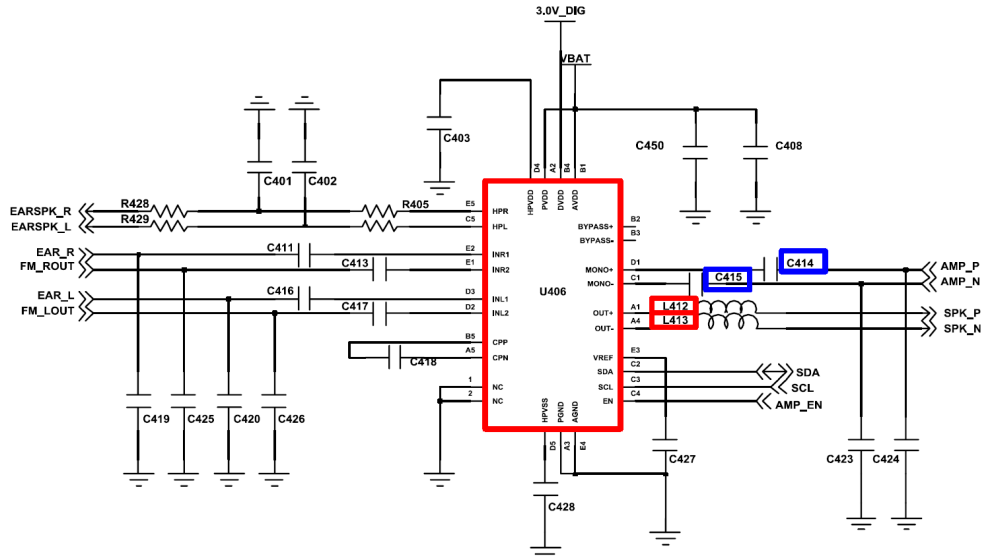




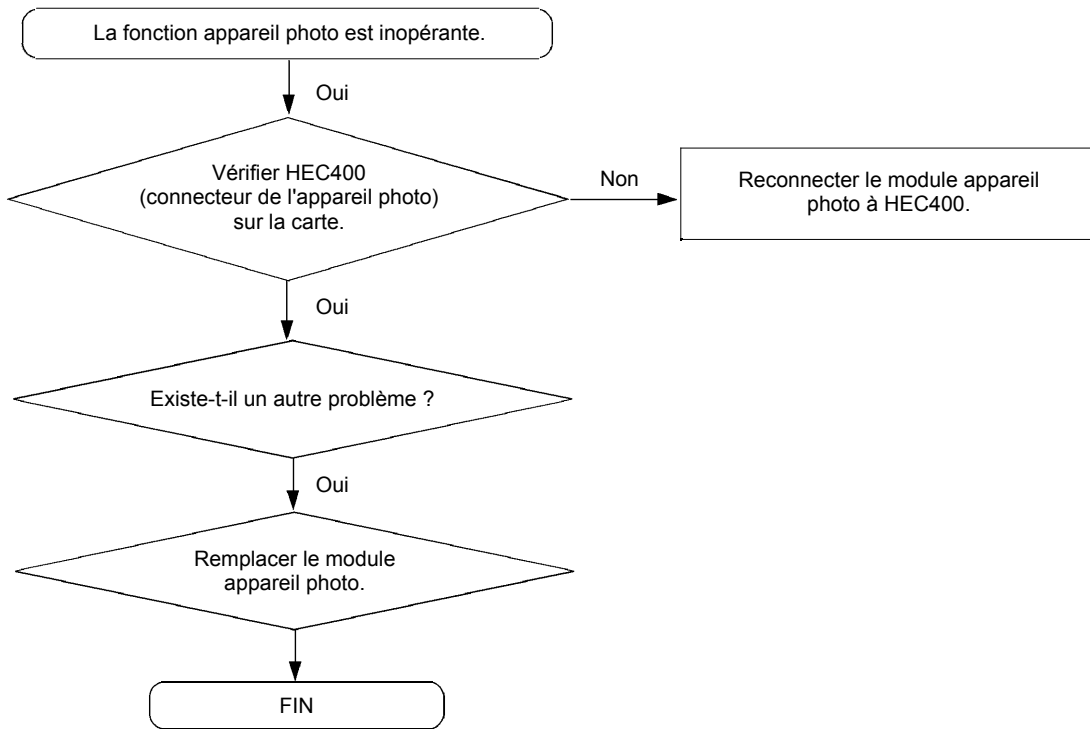


## 9-6. Section haut-parleur (mélodie)

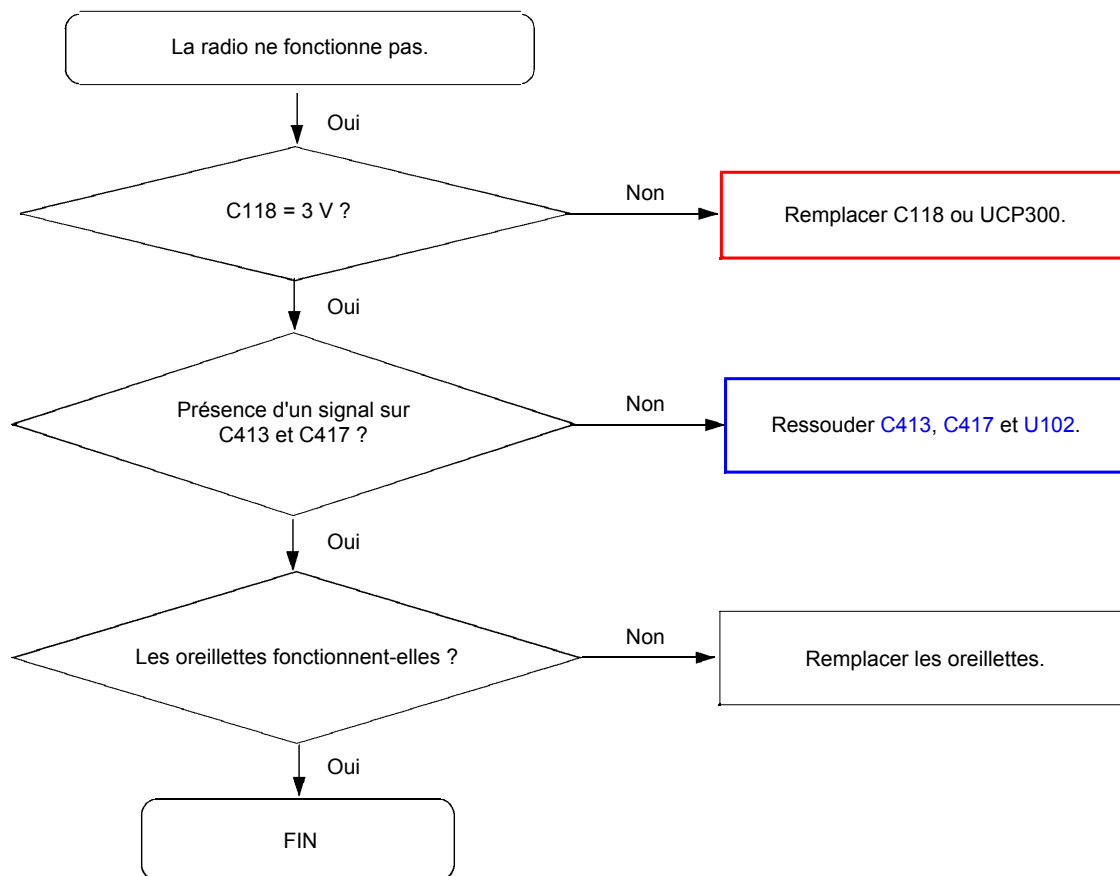


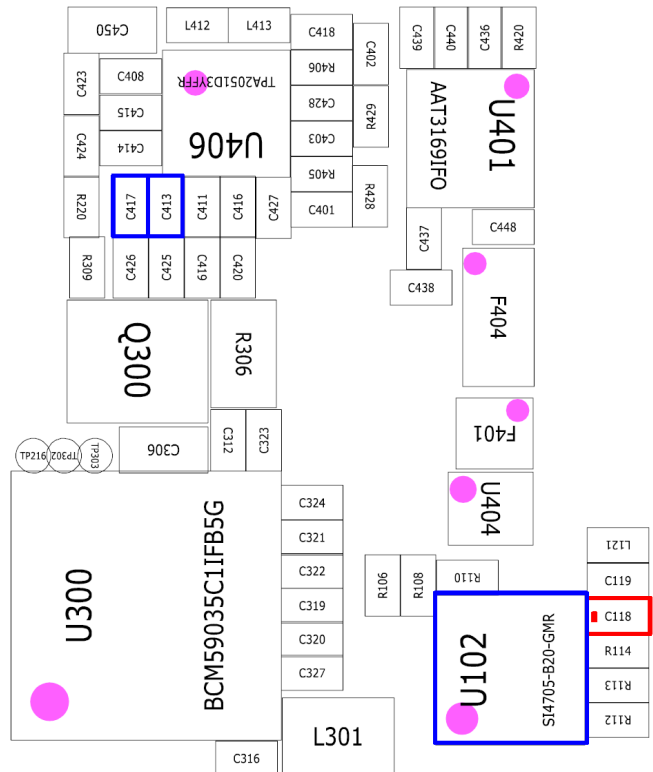
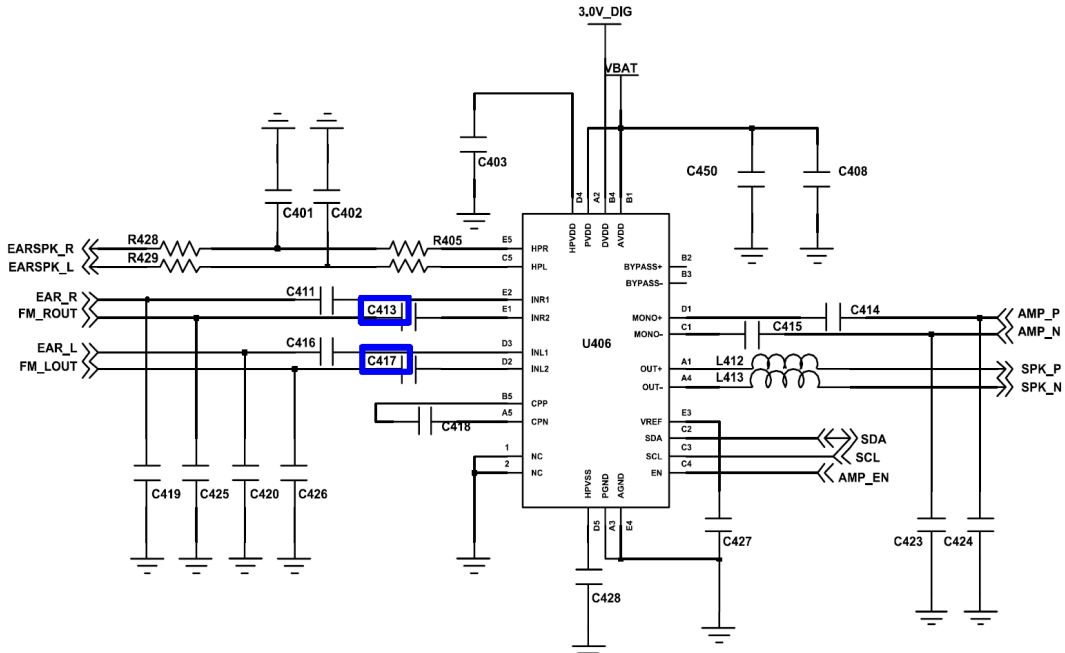


## 9-7. Section appareil photo

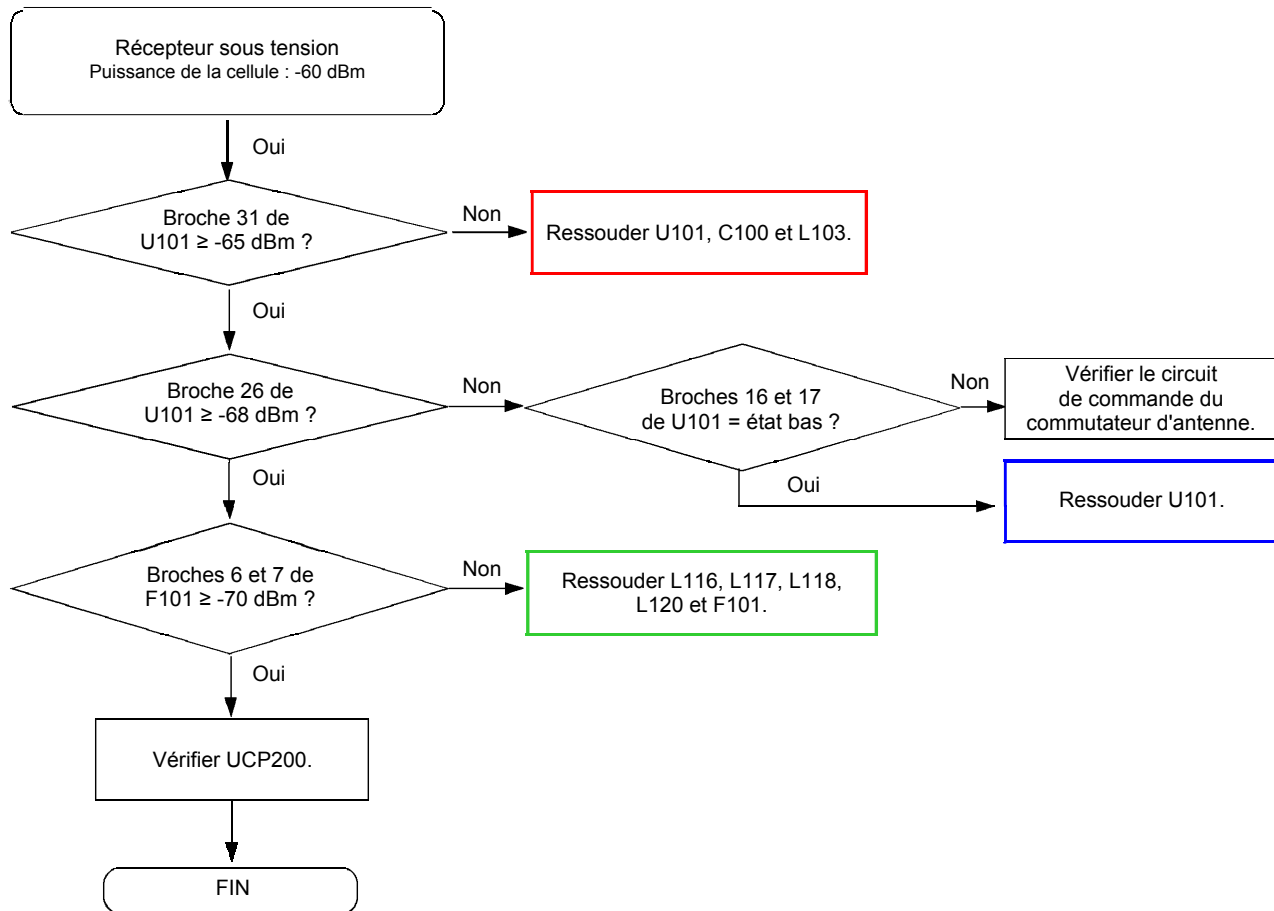


## 9-8. Section radio

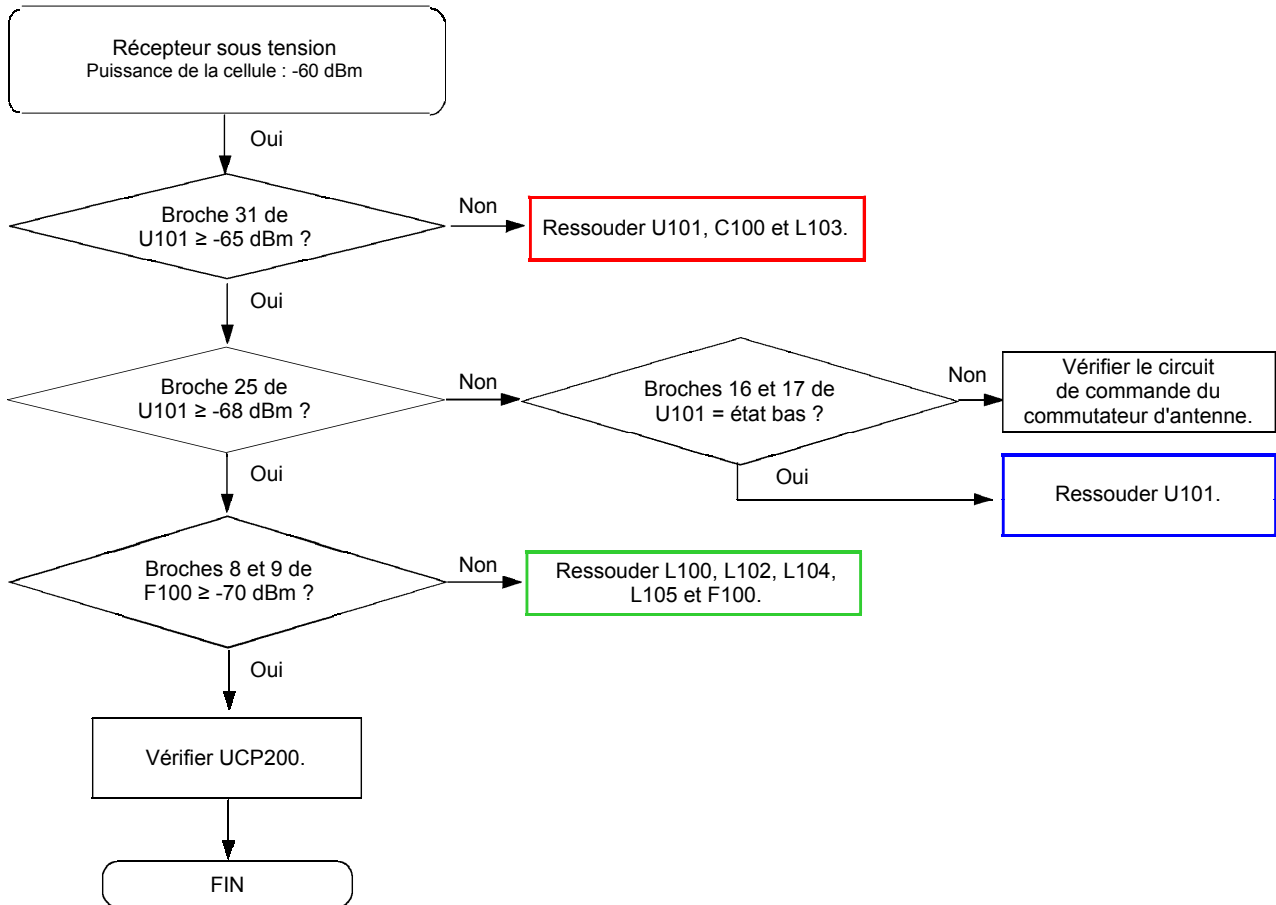




## 9-9. Récepteur GSM

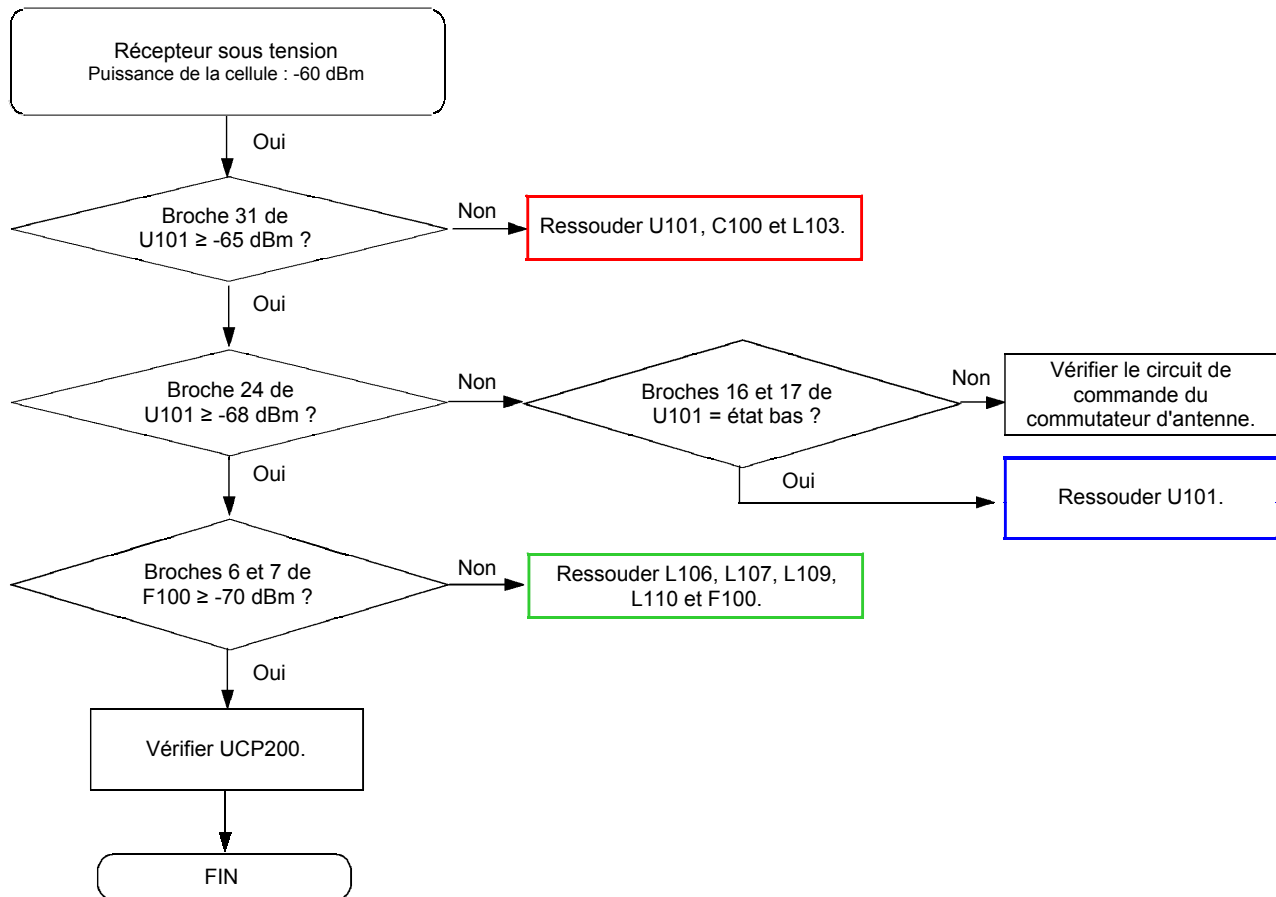


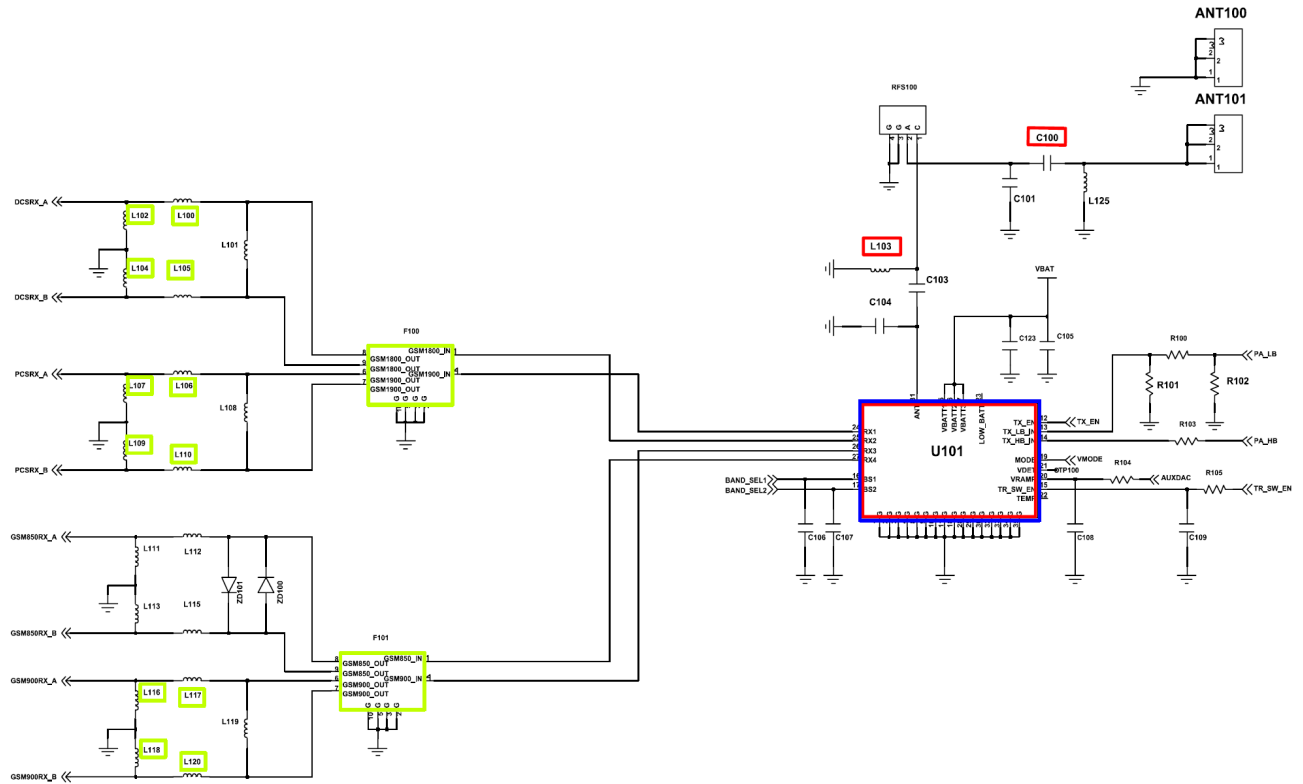
## 9-10. Récepteur DCS

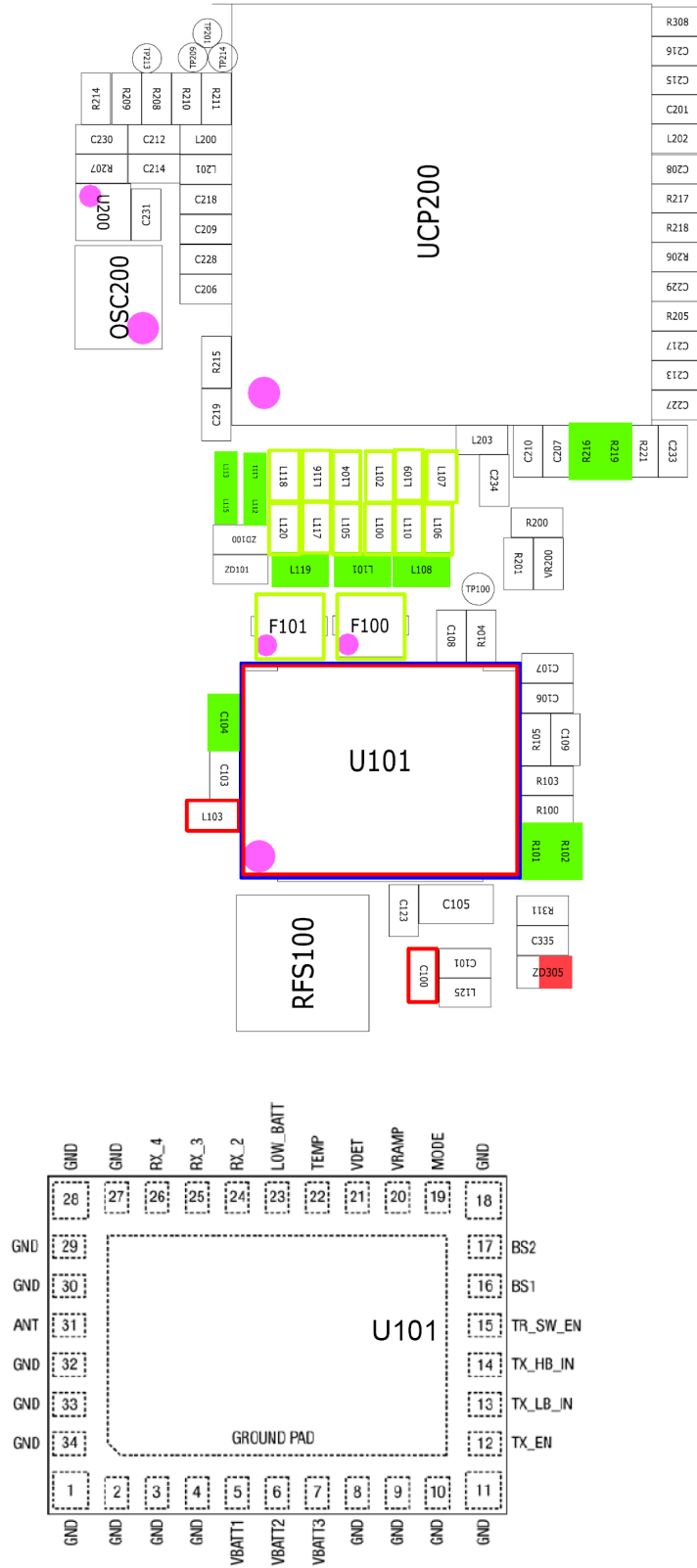




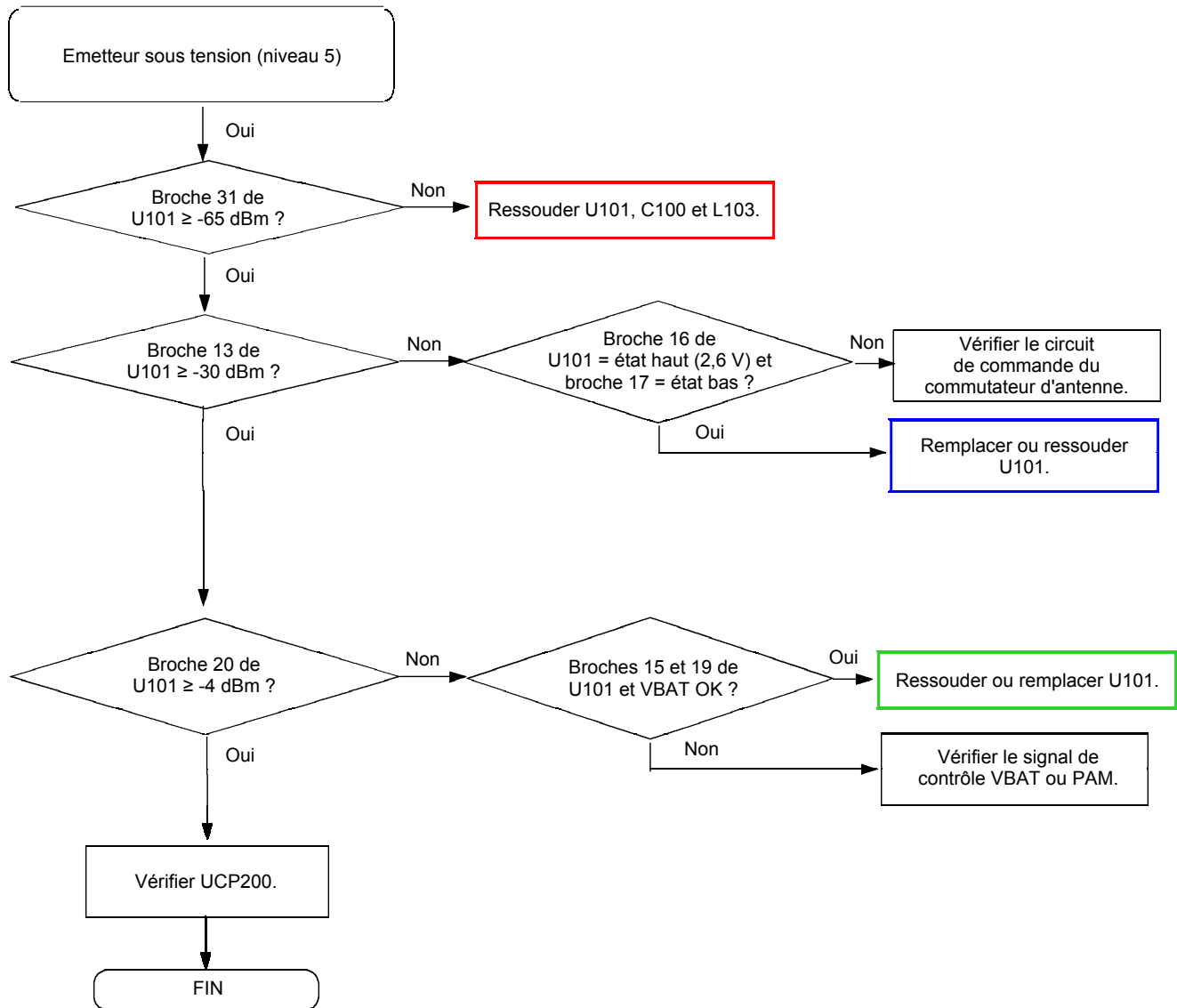
## 9-11. Récepteur PCS



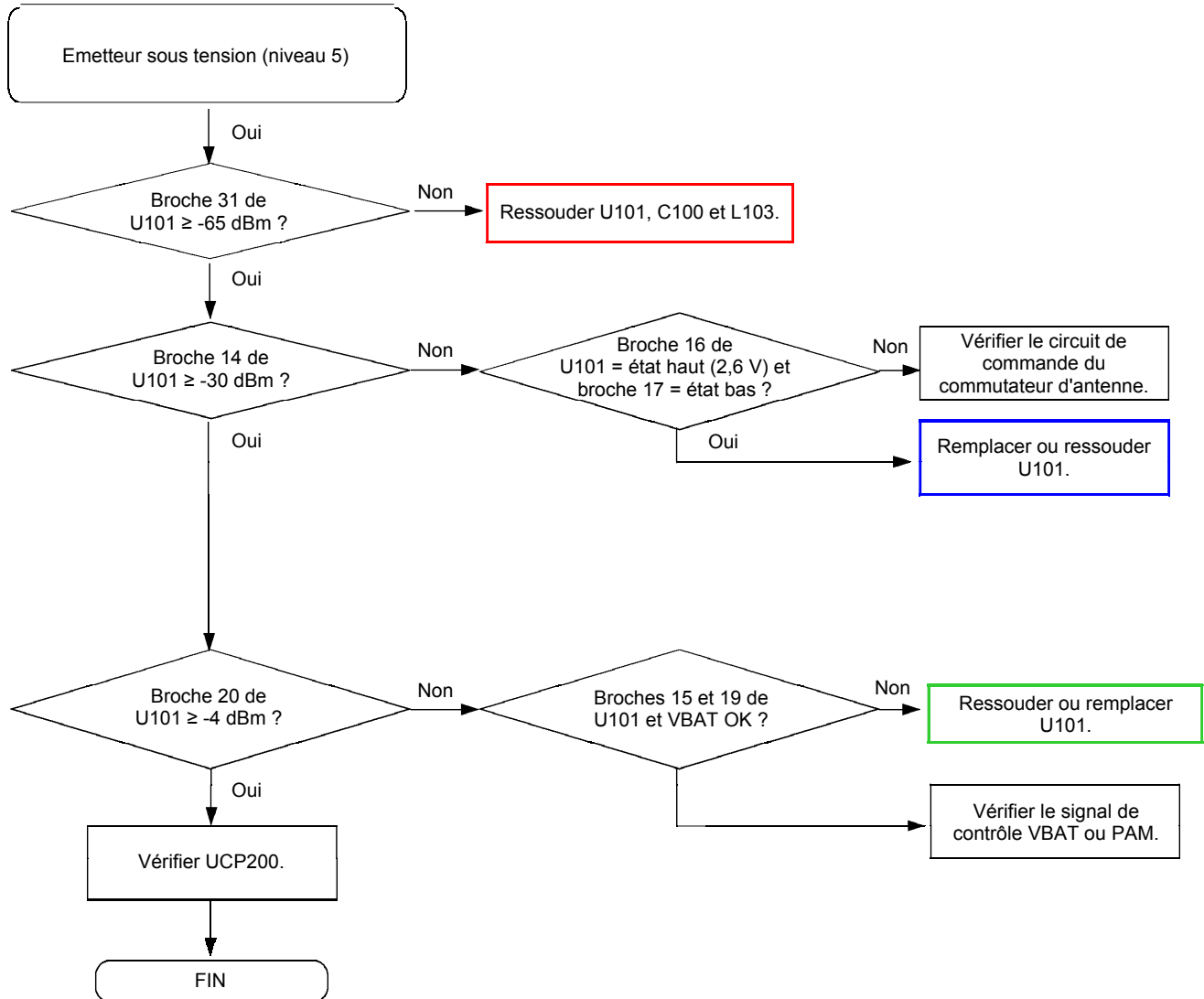




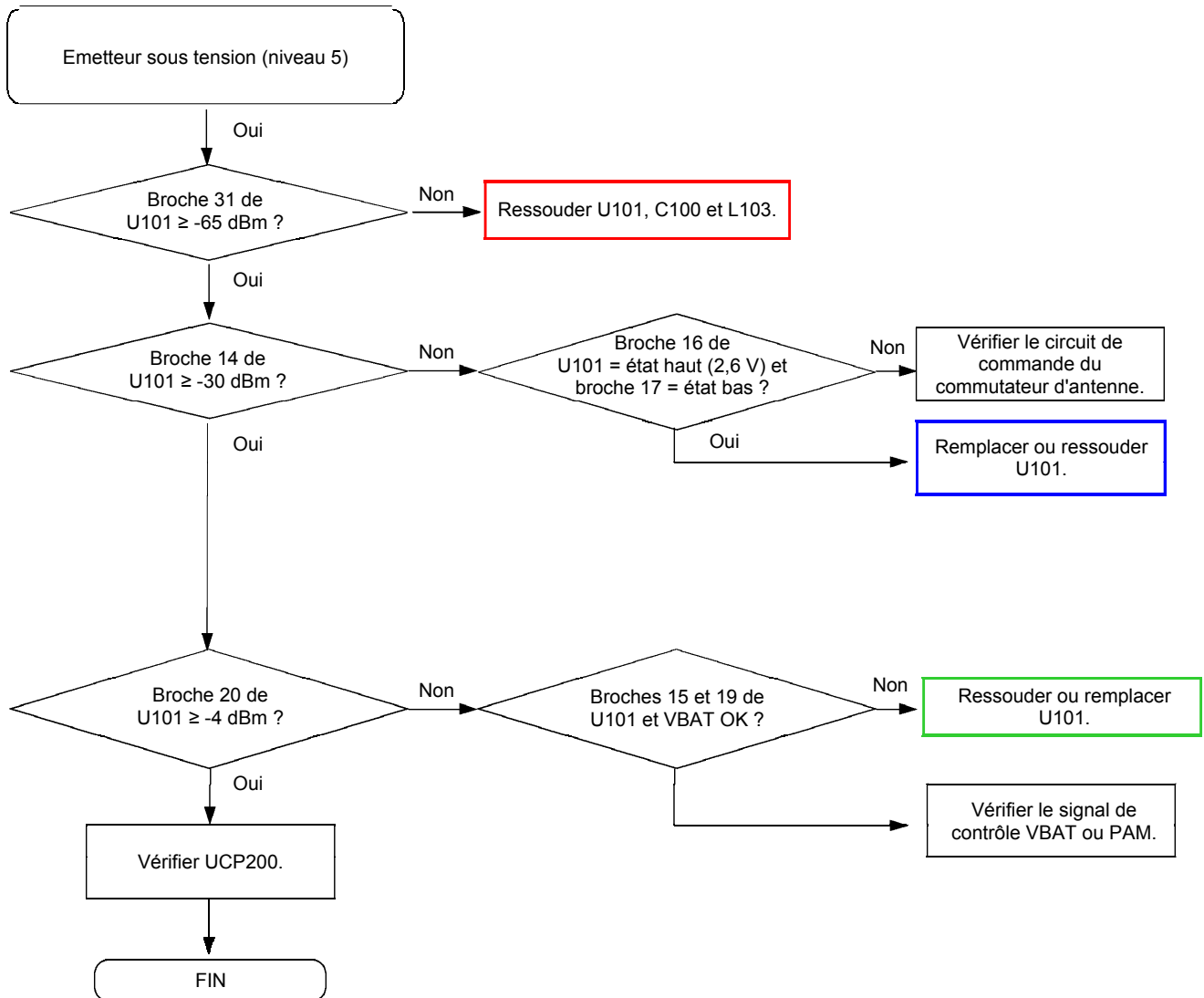
## 9-12. Emetteur GSM

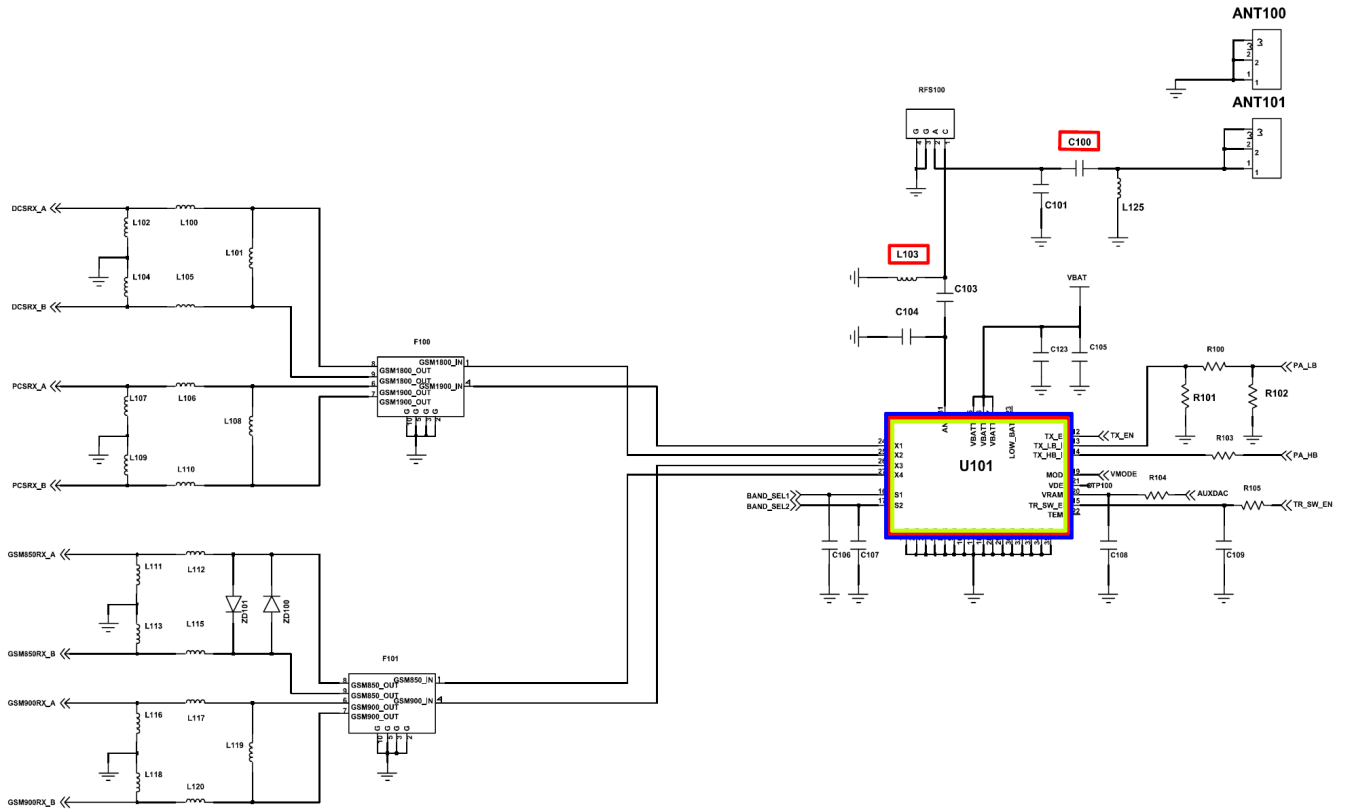


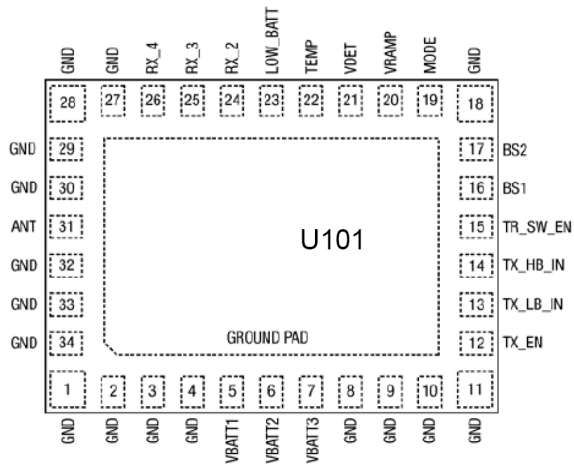
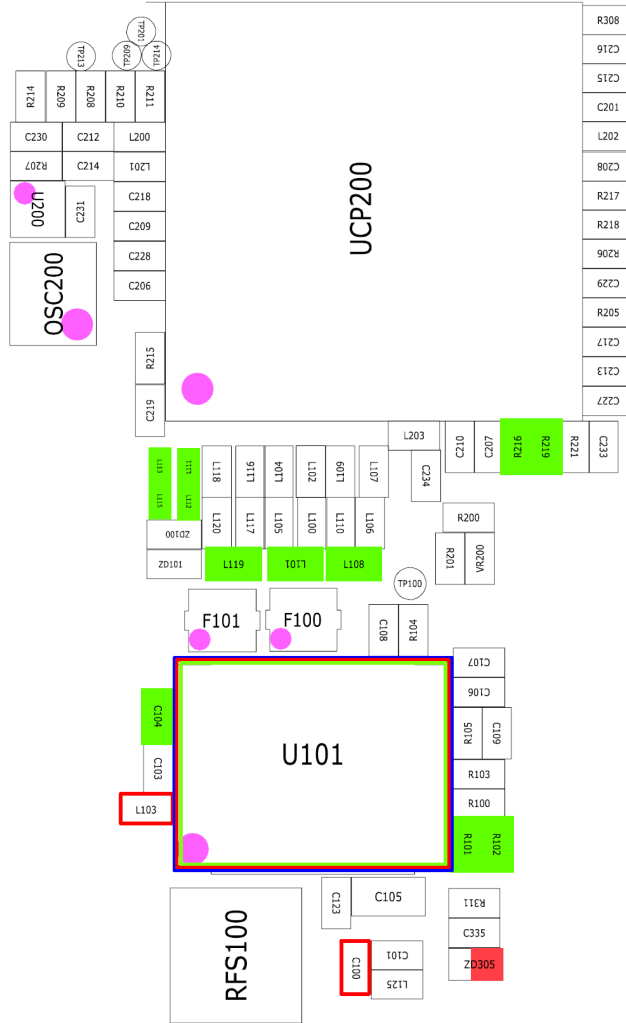
## 9-13. Emetteur DCS



### 9-14. Emetteur PCS

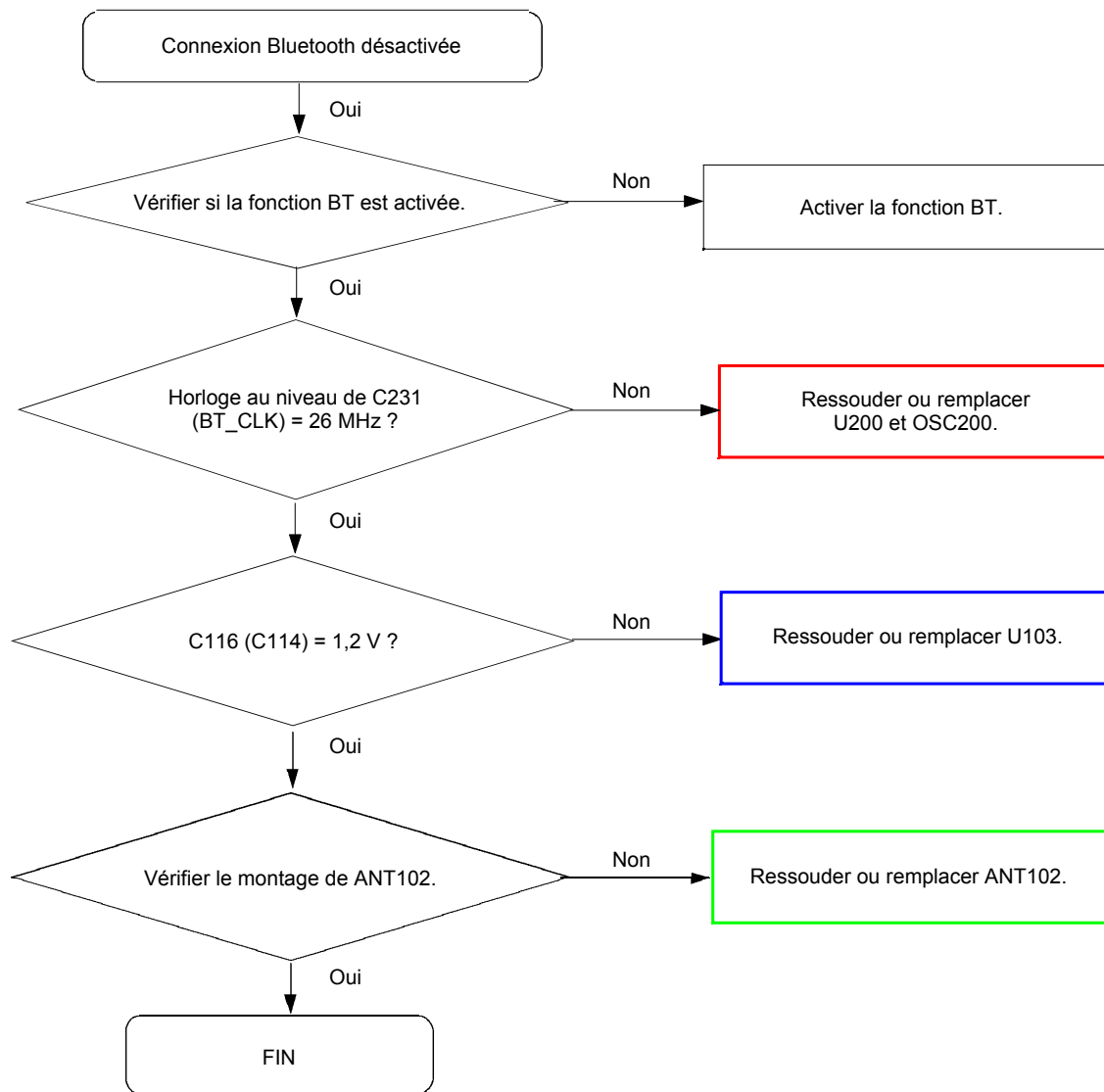






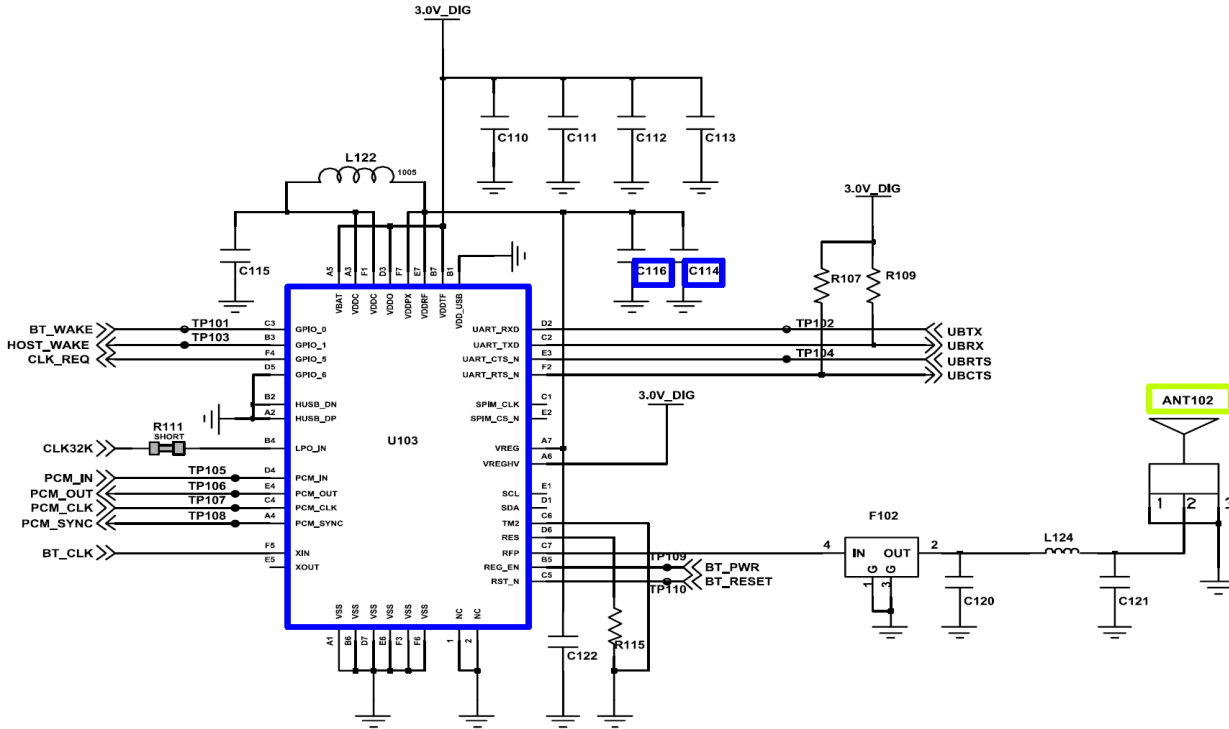


## 9-15. Section Bluetooth

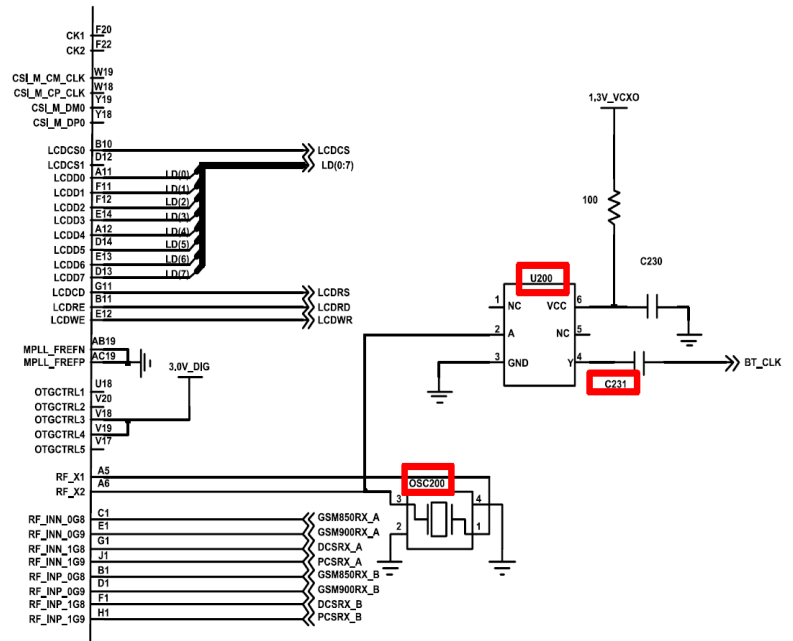


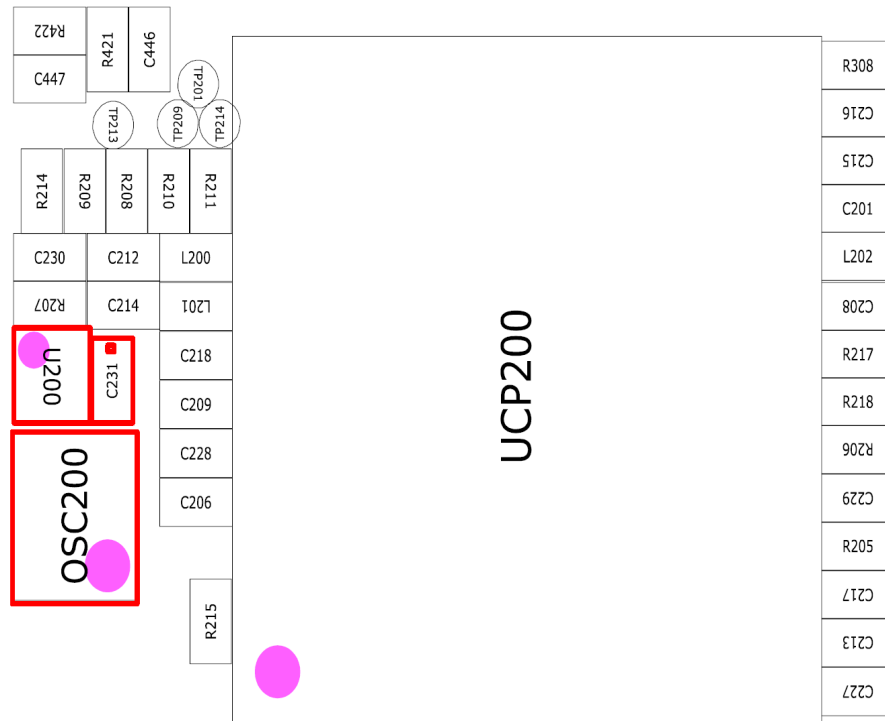
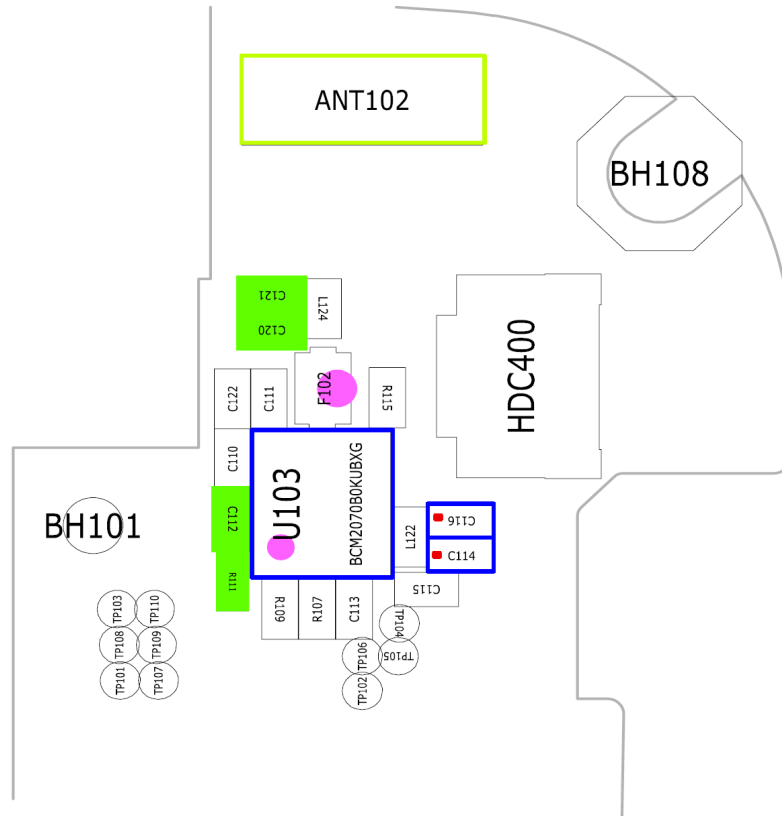


<Horloge 26 MHz>



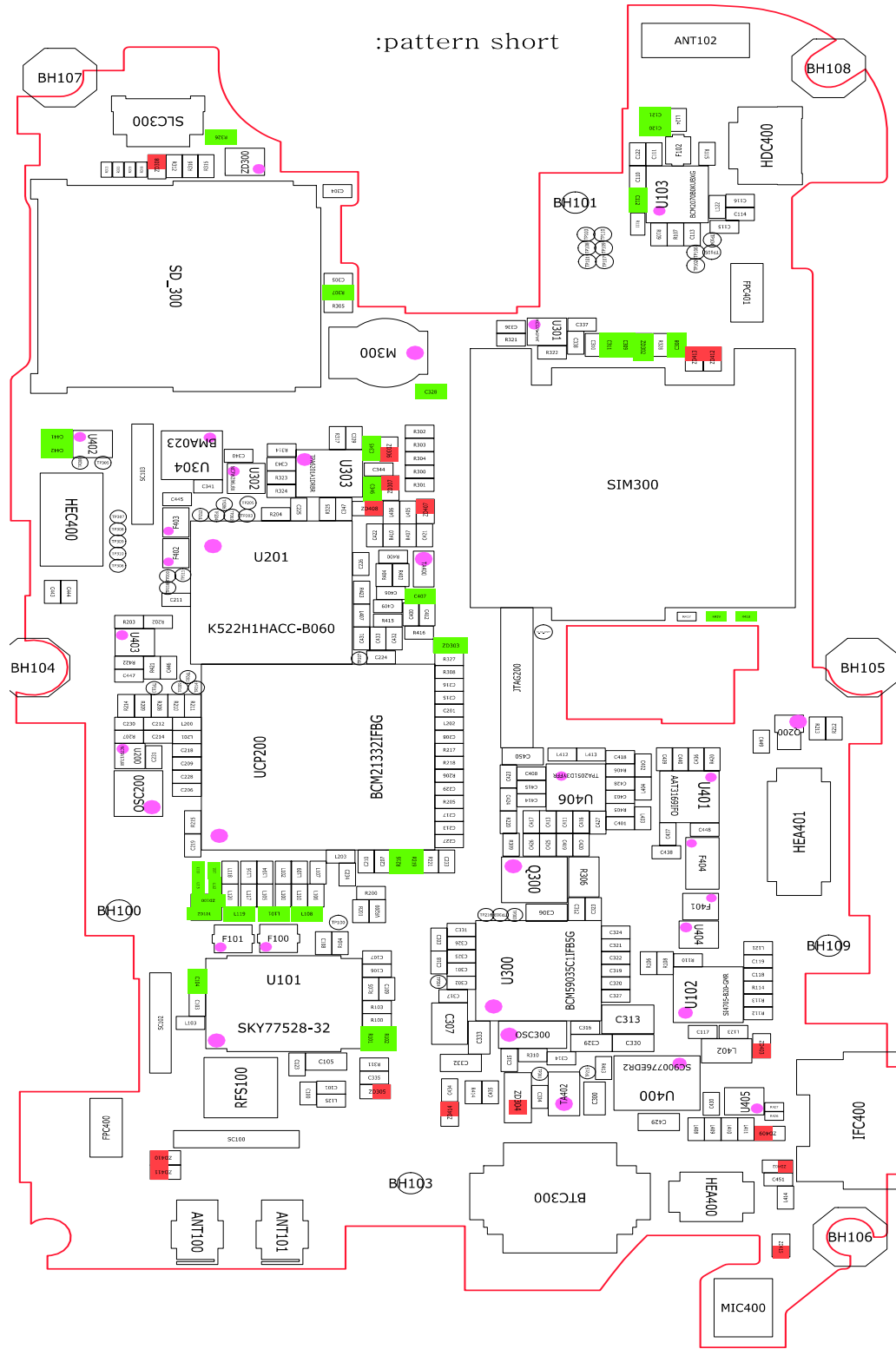
# UCP200



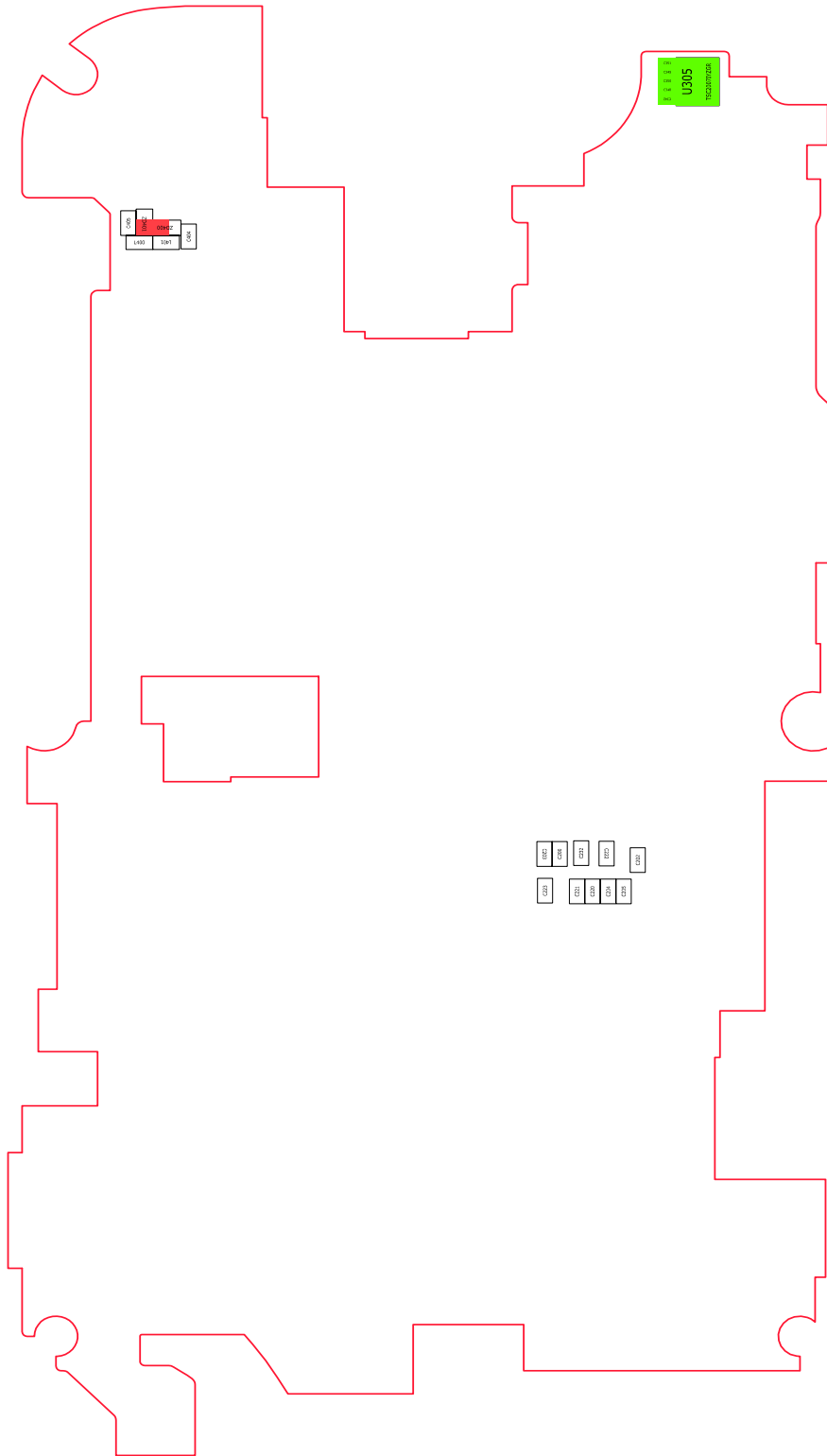


# 8. PCB Diagrams

Top

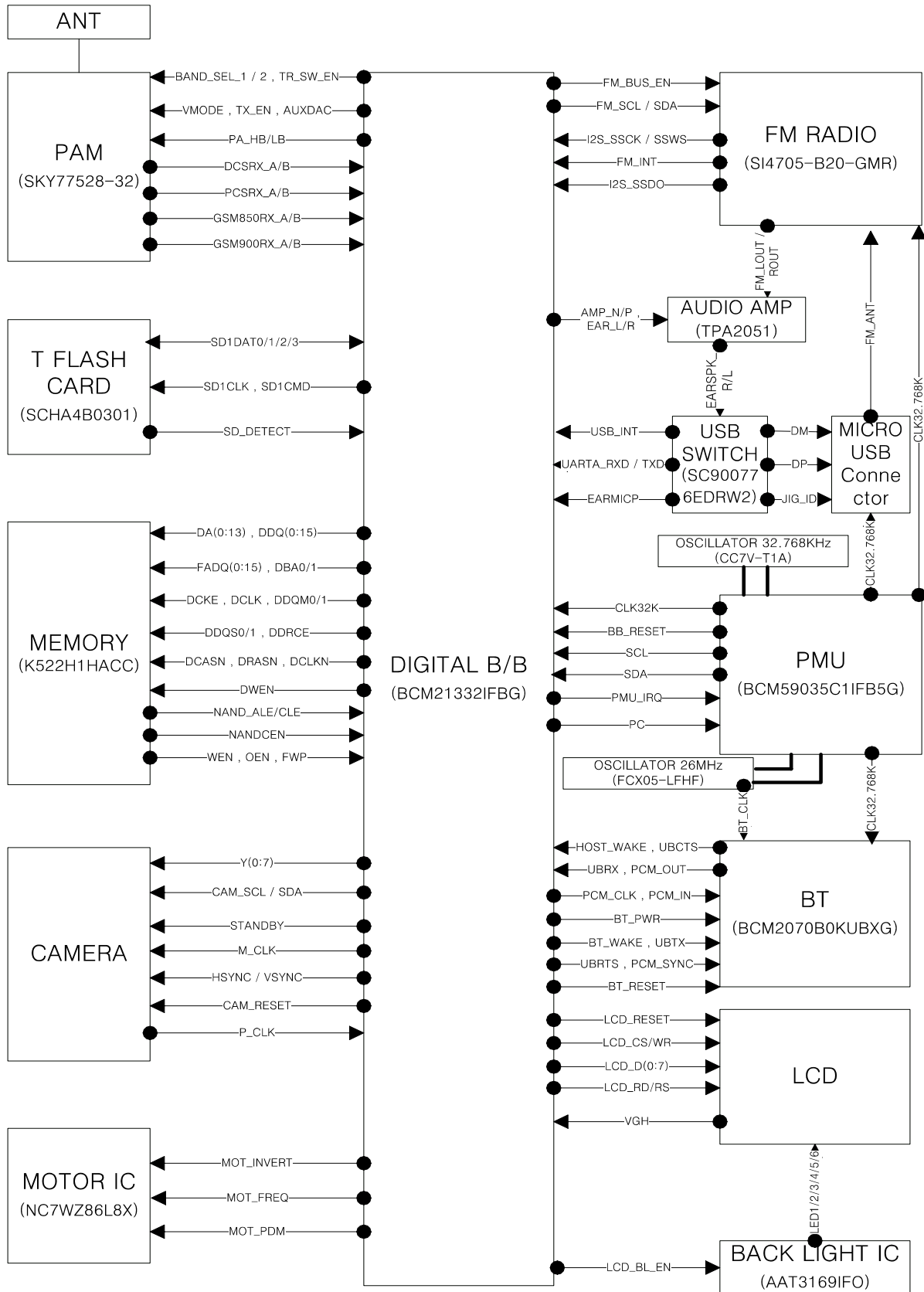


### Bottom

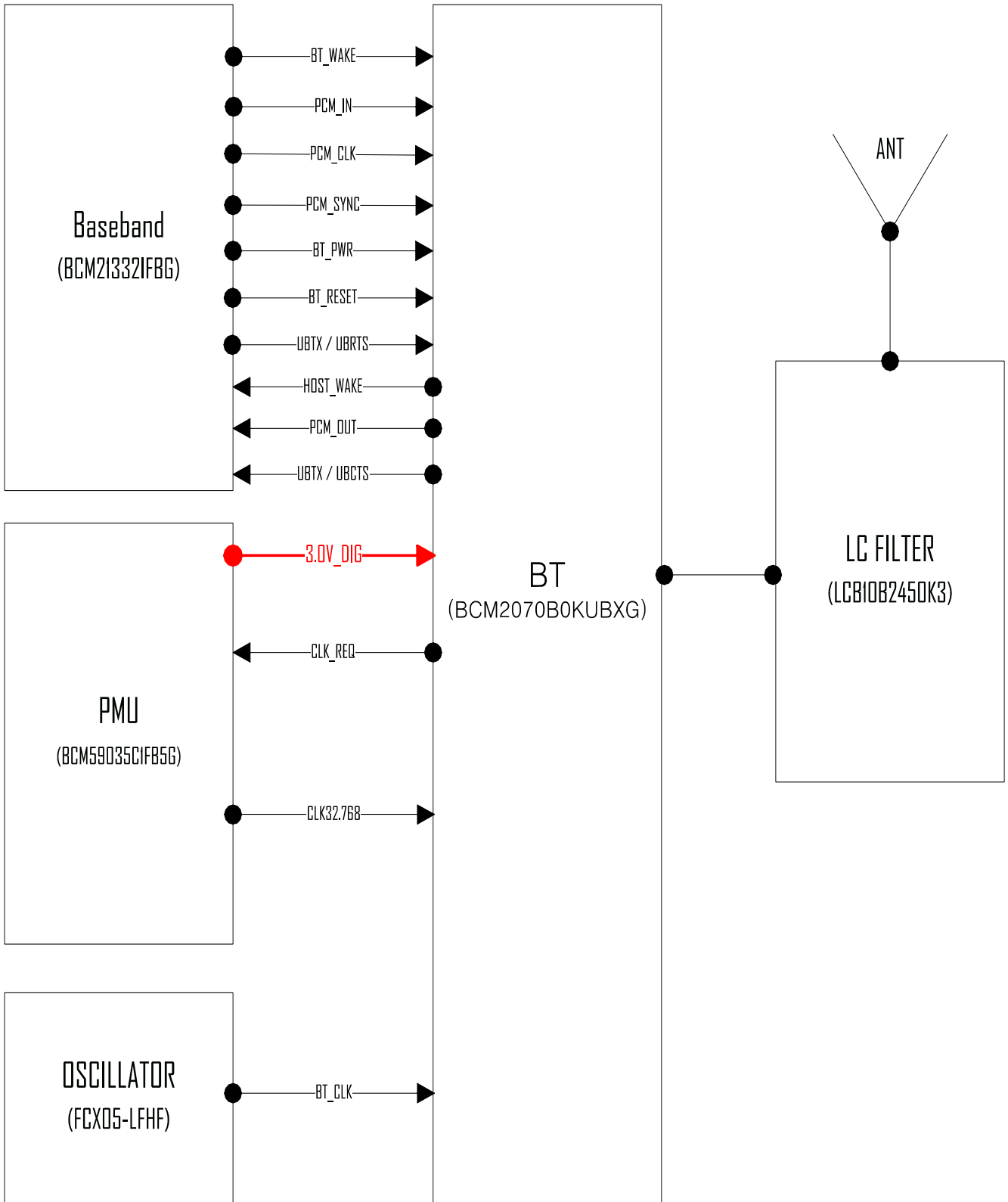


# 7. Block Diagrams

## 7-1. RF/BB Block Diagram



7-2. BLUETOOTH





## 2. Spécifications

### 2-1. Spécifications générales GSM

	<b>GSM900 Phase 1</b>	<b>DCS1800 Phase 1</b>	<b>PCS1900</b>
Bande de fréquences [MHz] Liaison ascendante / descendante	880 - 915 925 - 960	1 710 - 1 785 1 805 - 1 880	1 850 - 1 910 1 930 - 1 990
Plage ARFCN	1 - 124 & 975 - 1 023	512 - 885	512 - 810
Espacement émetteur / récepteur	45 MHz	95 MHz	80 MHz
Débit binaire / période binaire de modulation	270,833 Kbits/s 3,692 µs	270,833 Kbits/s 3,692 µs	270,833 Kbits/s 3,692 µs
Intervalle de temps / période de trame	576,9 µs 4,615 ms	576,9 µs 4,615 ms	576,9 µs 4,615 ms
Modulation	0,3 GMSK	0,3 GMSK	0,3 GMSK
Puissance SM	33 - 5 dBm	30 - 0 dBm	30 - 0 dBm
Classe de puissance	5 - 19 pcl	0 - 15 pcl	0 - 15 pcl
Sensibilité	-102 dBm	-100 dBm	-100 dBm
Multiplexage TDMA	8	8	8
Rayon de cellule	35 km	2 km	-

## 2-2. Classe de puissance de l'émetteur GSM

Niveau de commande de la puissance d'émission	GSM900	Niveau de commande de la puissance d'émission	DCS1800	Niveau de commande de la puissance d'émission	PCS1900
5	33 ± 3 dBm	0	30 ± 3 dBm	0	30 ± 3 dBm
6	31 ± 3 dBm	1	28 ± 3 dBm	1	28 ± 3 dBm
7	29 ± 3 dBm	2	26 ± 3 dBm	2	26 ± 3 dBm
8	27 ± 3 dBm	3	24 ± 3 dBm	3	24 ± 3 dBm
9	25 ± 3 dBm	4	22 ± 3 dBm	4	22 ± 3 dBm
10	23 ± 3 dBm	5	20 ± 3 dBm	5	20 ± 3 dBm
11	21 ± 3 dBm	6	18 ± 3 dBm	6	18 ± 3 dBm
12	19 ± 3 dBm	7	16 ± 3 dBm	7	16 ± 3 dBm
13	17 ± 3 dBm	8	14 ± 3 dBm	8	14 ± 3 dBm
14	15 ± 3 dBm	9	12 ± 4 dBm	9	12 ± 4 dBm
15	13 ± 3 dBm	10	10 ± 4 dBm	10	10 ± 4 dBm
16	11 ± 5 dBm	11	8 ± 4 dBm	11	8 ± 4 dBm
17	9 ± 5 dBm	12	6 ± 4 dBm	12	6 ± 4 dBm
18	7 ± 5 dBm	13	4 ± 4 dBm	13	4 ± 4 dBm
19	5 ± 5 dBm	14	2 ± 5 dBm	14	2 ± 5 dBm
		15	0 ± 5 dBm	15	0 ± 5 dBm

**2-3. Classe de puissance de l'émetteur GSM EDGE**

Uniquement dans Master

Niveau de commande de la puissance d'émission	GSM900	Niveau de commande de la puissance d'émission	DCS1800	Niveau de commande de la puissance d'émission	PCS1900
8	27 ± 3 dBm	2	26 ± 3 dBm	2	26 ± 3 dBm
9	25 ± 3 dBm	3	24 ± 3 dBm	3	24 ± 3 dBm
10	23 ± 3 dBm	4	22 ± 3 dBm	4	22 ± 3 dBm
11	21 ± 3 dBm	5	20 ± 3 dBm	5	20 ± 3 dBm
12	19 ± 3 dBm	6	18 ± 3 dBm	6	18 ± 3 dBm
13	17 ± 3 dBm	7	16 ± 3 dBm	7	16 ± 3 dBm
14	15 ± 3 dBm	8	12 ± 3 dBm	8	12 ± 3 dBm
15	13 ± 3 dBm	9	10 ± 3 dBm	9	10 ± 3 dBm
6	11 ± 5 dBm	10	14 ± 3 dBm	10	14 ± 3 dBm
17	9 ± 5 dBm	11	12 ± 4 dBm	11	12 ± 4 dBm
18	7 ± 5 dBm	12	10 ± 4 dBm	12	10 ± 4 dBm
19	5 ± 5 dBm	13	8 ± 4 dBm	13	8 ± 4 dBm
		14	6 ± 4 dBm	14	6 ± 4 dBm
		15	4 ± 4 dBm	15	4 ± 4 dBm

## 4. Téléchargement de logiciel

### 4-1. Réglages logiciels



Outil de réglage (GH99-36900A)



Câble de test (GH39-01290A)



Câble de test RF (GH39-00985A)



Adaptateur (GH99-38251A)

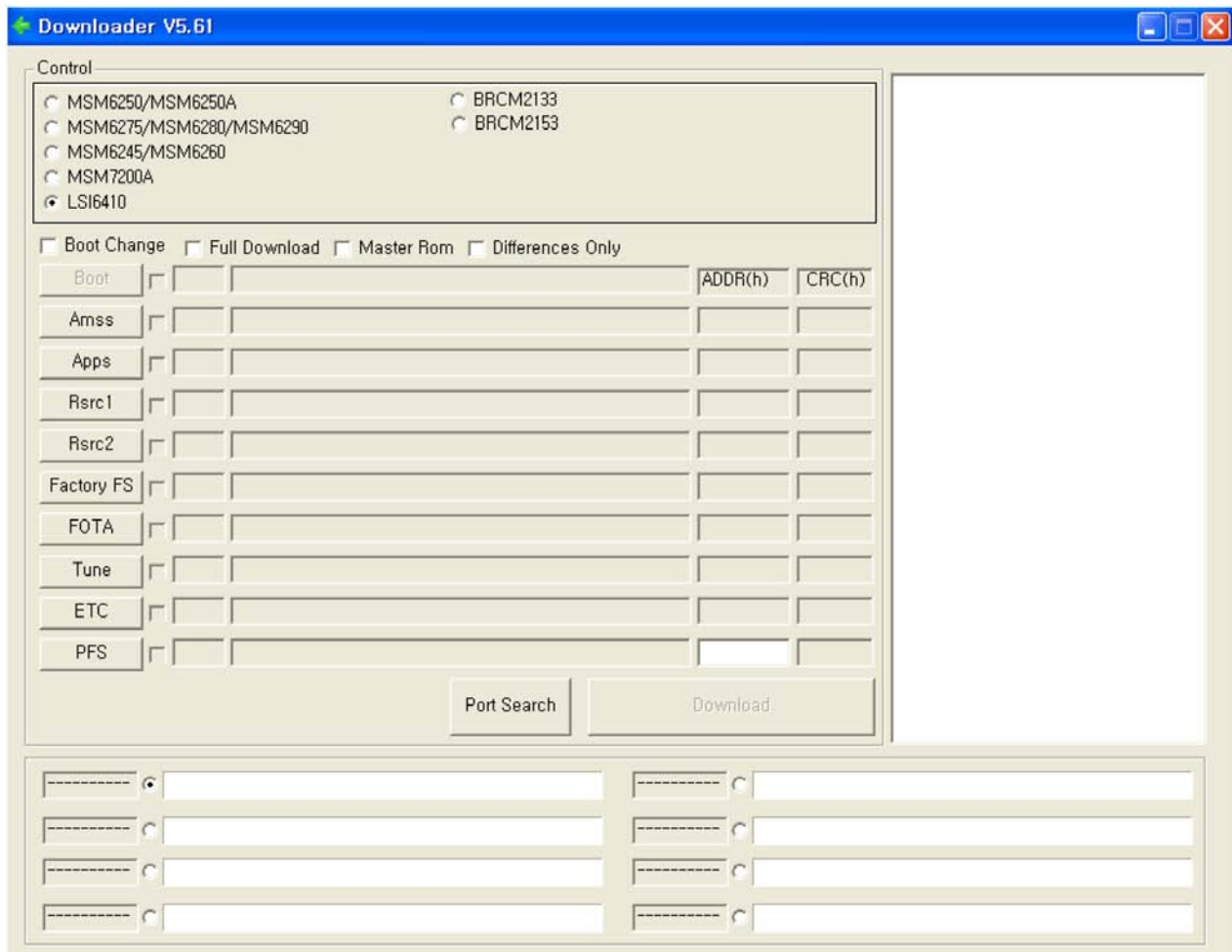
## 4-2. Procédure de téléchargement

### 4-2-1. Conditions préalables au téléchargement

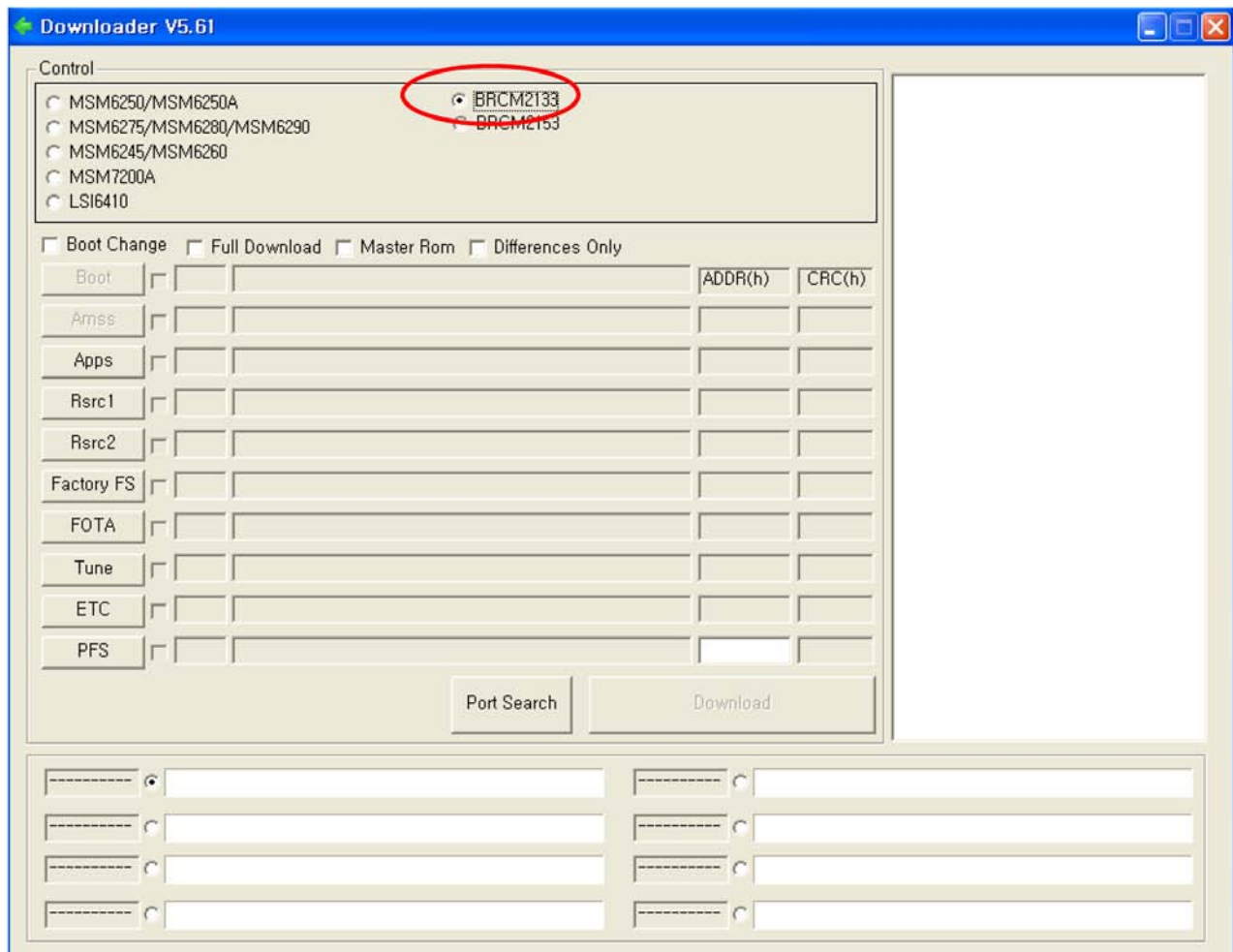
- Programme de téléchargement ([Downloader V5.61](#))
- Téléphone mobile GT-S7070
- Câble de transfert de données
- Fichiers binaires

### 4-2-2. Téléchargement des logiciels

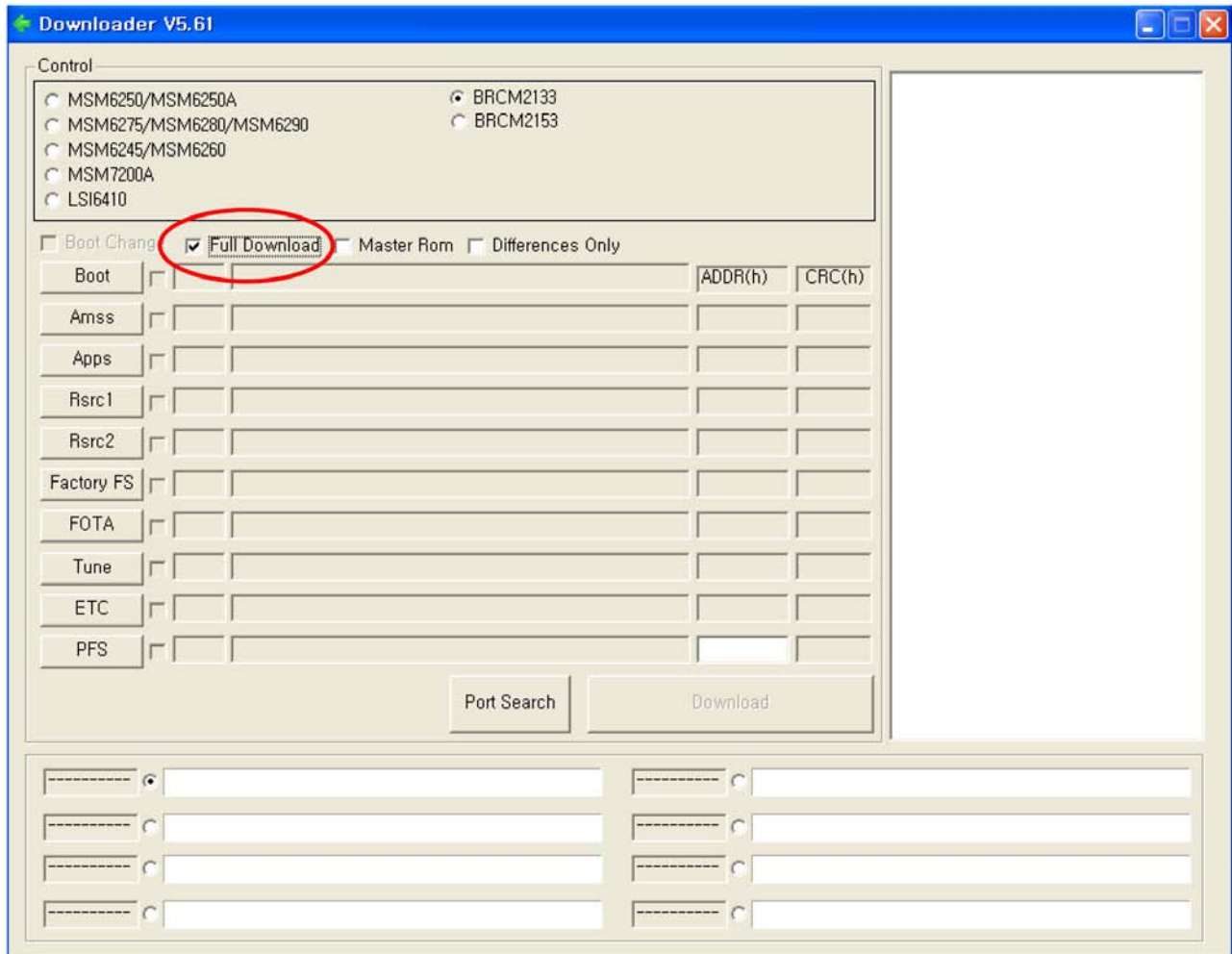
1. Chargez le programme de téléchargement du fichier binaire en exécutant le programme "[Downloader V5.61](#)".



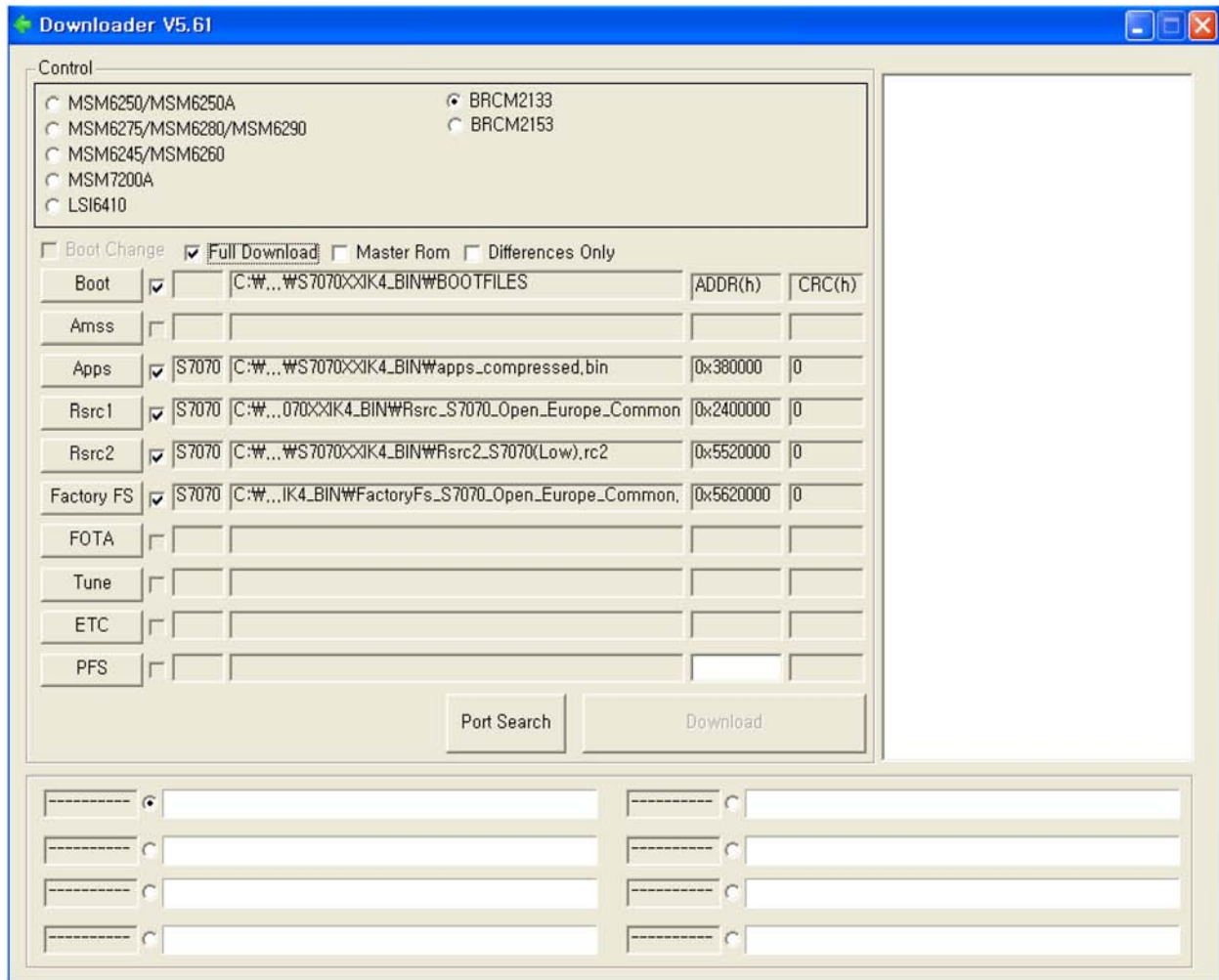
## 2. Sous **Control** (Commande), sélectionnez **BRCM2133**.



### 3. Choisissez **Full Download** (Téléchargement complet).

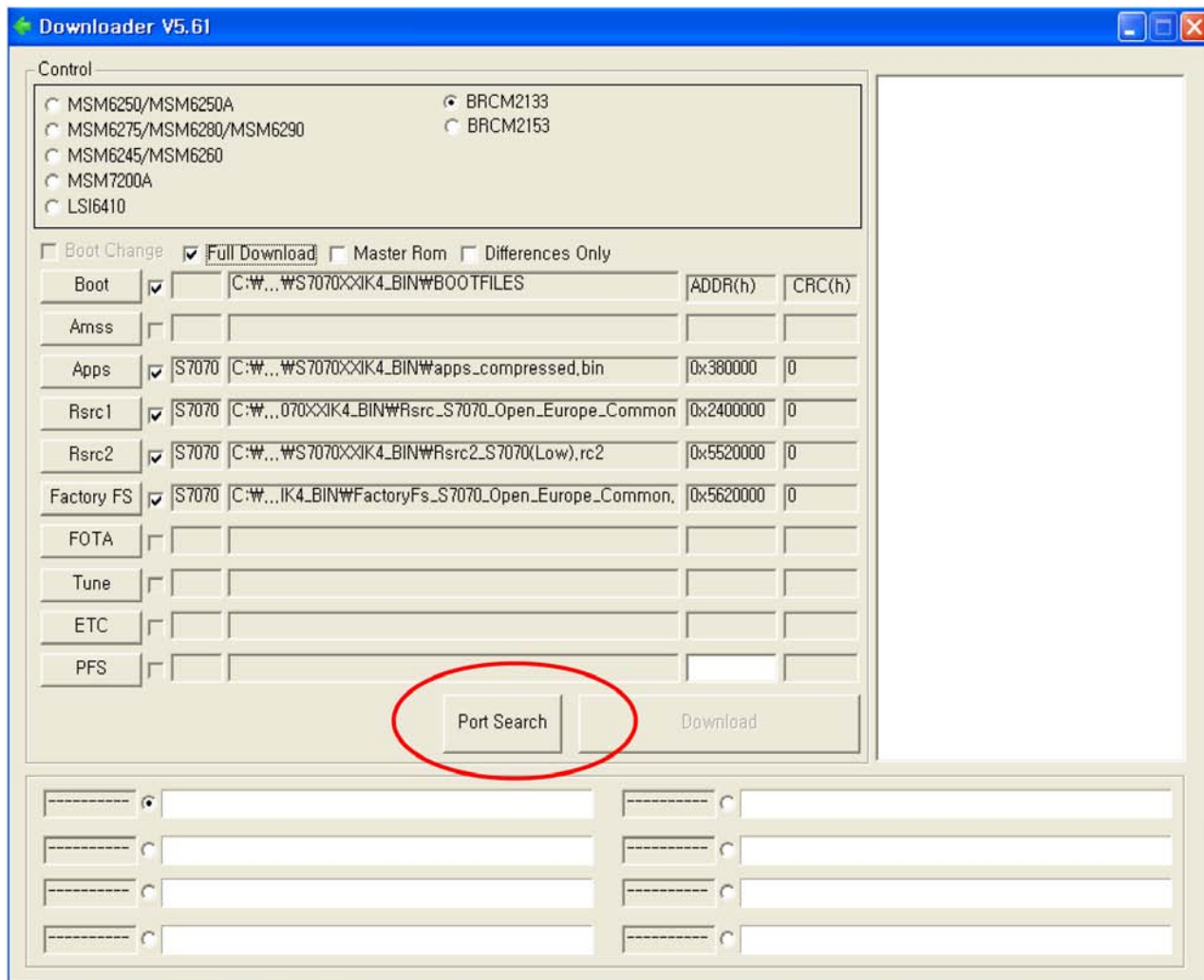


4. Téléchargez le fichier correspondant à **Boot**, **Amss**, **Apps**, **Rsrc1**, **Rsrc2** et **Factory FS** à partir du dossier dans lequel vous avez enregistré les fichiers binaires.



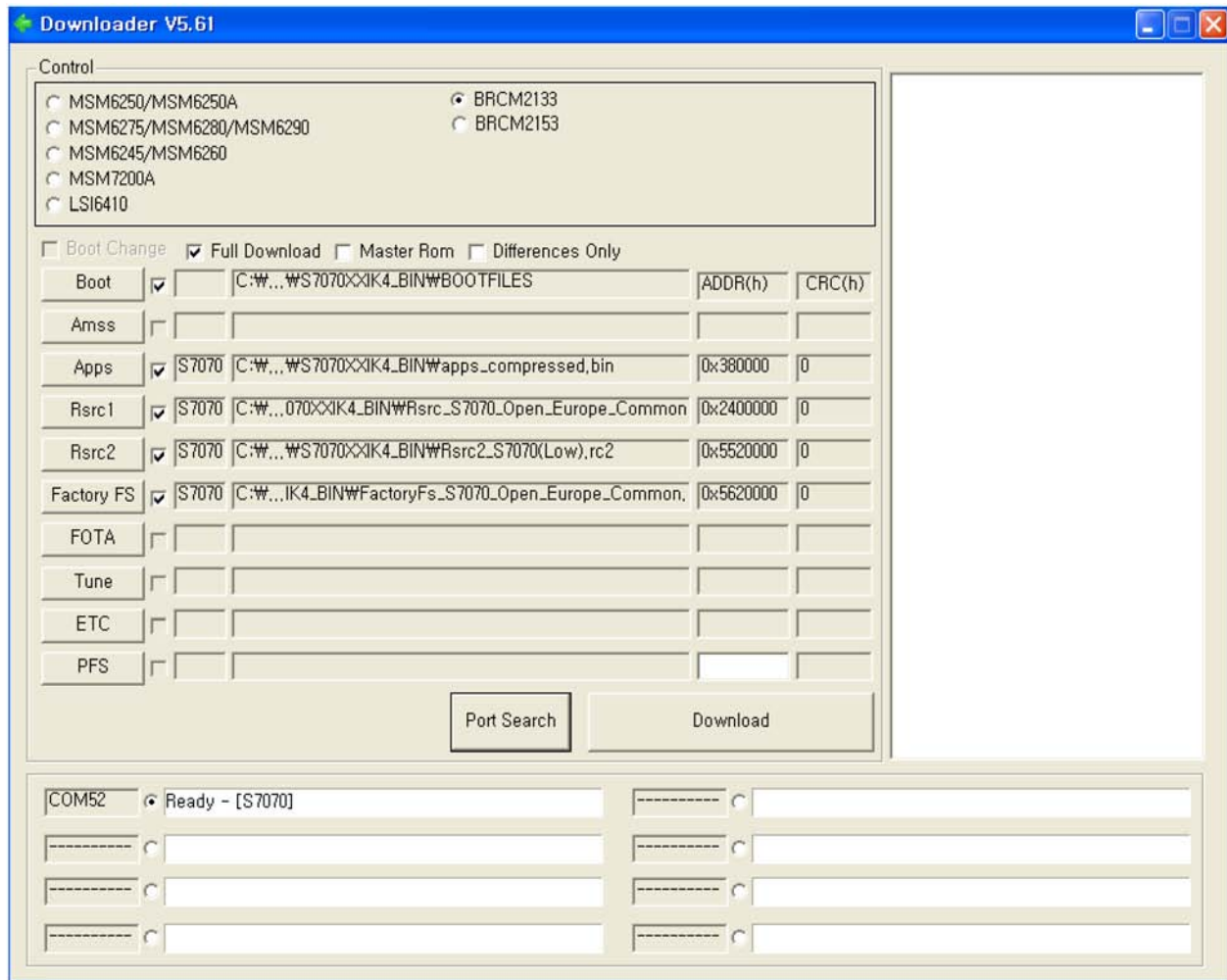


5. Cliquez sur le bouton **Port Search** (Rechercher le port) après avoir raccordé le câble de téléchargement à l'ordinateur.

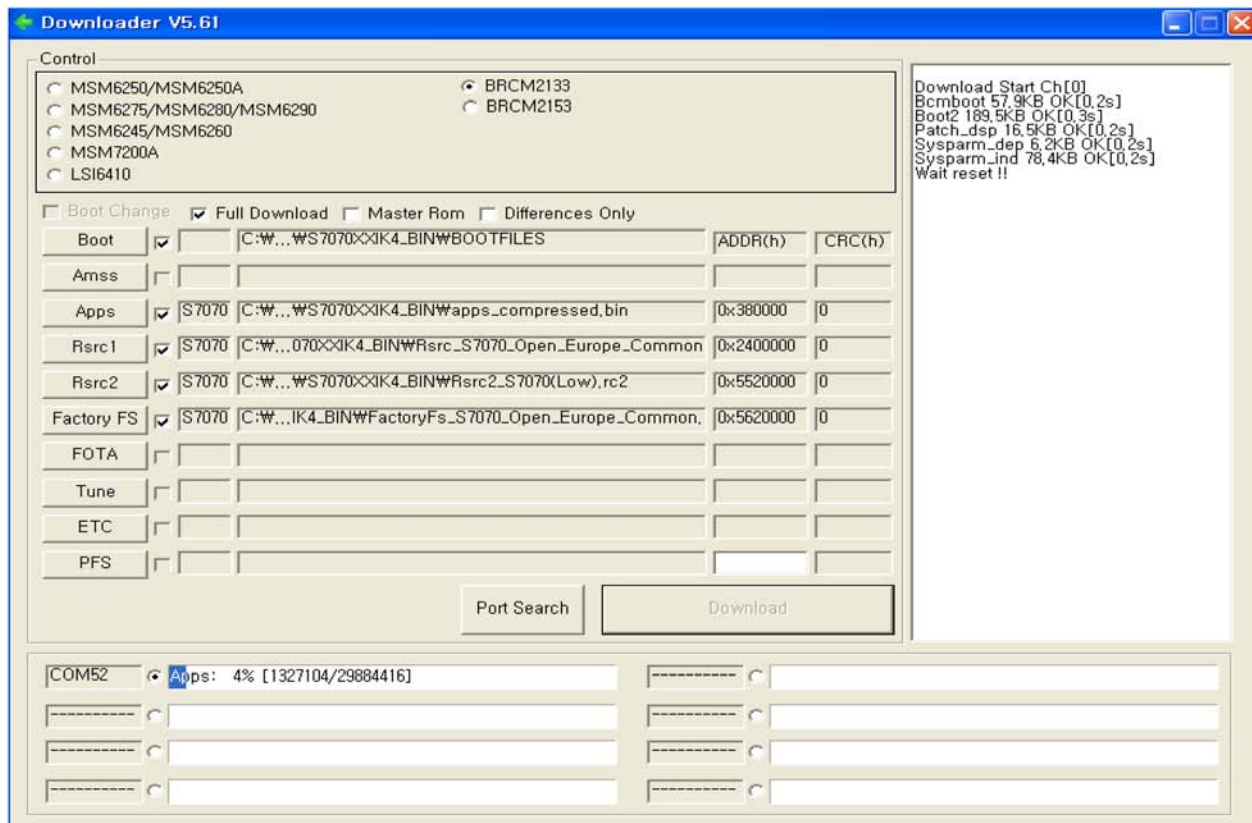


Remarque : vous devez régler le téléphone sur le mode téléchargement en appuyant sur Volume - avant de connecter l'ordinateur.

## 6. Le logiciel de téléchargement peut alors rechercher le port.



7. Cliquez sur le bouton **Download** (Télécharger) lorsque le port a été trouvé. Le téléchargement débute.



8. Une fois le téléchargement terminé, le message "All files complete" (Tous les fichiers terminés) s'affiche.

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## 5. Exploded View and Parts List

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### 5-1. Cellular phone Exploded View

