



MOTOROLA

Motorola GmbH, CSS Center, Mobile Devices

Doc. No: TSG_K1
Version: 1.0
Date: 01.12.2006

Title: Troubleshooting-Guide **K1**

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LEVEL 3
DEBUG GUIDE
K1



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MODIFY	DATE	BY:
New	01-12-2006	Juan Antonio Ortiz

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No power up	pag 5 & 6
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**Requirements**

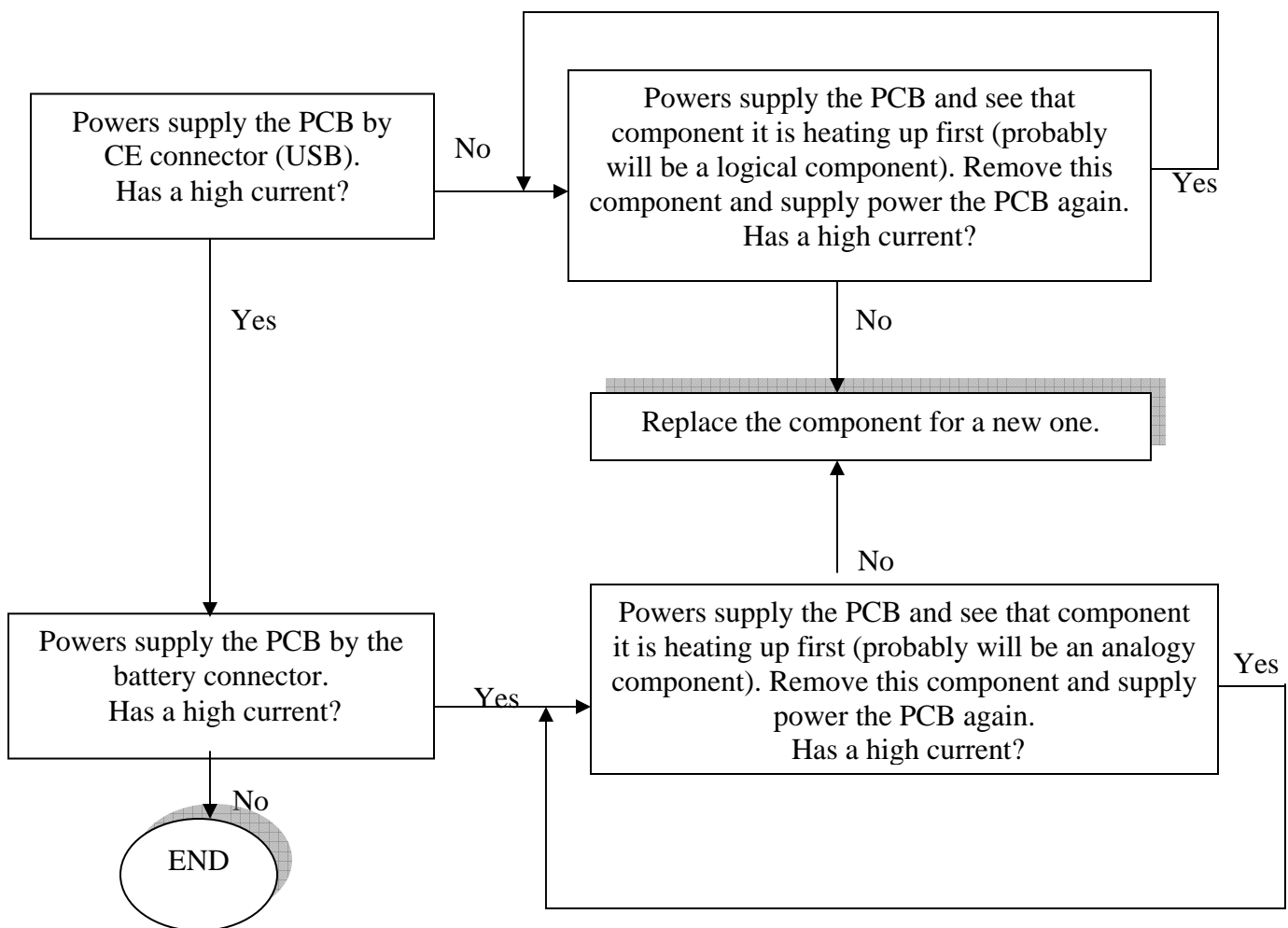
- **System Requirements**
- *Power supplies, Oscilloscope, Spectrum Analyzer, Test Set*
- *preheater for lead free soldering/ solder machine for BGA´s*
- *Microscope*
- *RepairStudio/Radiocomm,*
- *Field Service Bulletins*
- *FASTT*
- *Block diagrams/Schematics*
- *PinNetFinder FLVIEW*
- **Basic information on troubleshooting Motorola Phones**
- *Make sure all contacts are clean, especially the CE-Connector*
- *Use newest approved Software*
- *RESET / MASTERCLEAR can fix some issues*
- *Do a visual inspection on customer abuse/liquid contamination*
- **Advice on working with lead free soldering**
- *Remove RTC battery/microphone before soldering*
- *Work very carefully because of underfilled*
- *Use protection shields*
- *Use lead free flux*
- *Use preheater (HAKKO 853)*

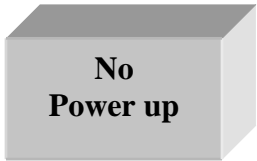


SPECIAL PROCEDURE FOR HIGH CURRENT FAILURE

If we supply power the PCB by the CE connector (USB) and check that it has high current, it means that this high current comes from the logical part (probably of the PCAP3). If we power supply by battery connector and has high current is very probable that the failure comes from the analogical part.

First we supply power the PCB by the cable on data (USB) and later by the battery connector to differentiate from where the failure comes. Once identified where the failure possibly comes from, we apply power to PCB to see what component is heating up first. Desolder the component and apply again power PCB and check if the high current still remains or not. If still remain we will follow the same procedure with next warm component.





Connect the PCB to Radiocomm program with data cable (SKN6371A) to USB and power supply with an external power supply 4.2 v.

Push power up button, the consume of PCB is about 50mA and is connect to PC?

Yes

Reflash the PCB.
Power up now?

Yes

END

No

No

PCBs consume is 0.5mA always?

Yes

Are presents these voltages?
VBoost=5.8v in C936
VBuck=1.6v in C904
VRF=2.8v in C908

No

Yes

Replace U900 (PCAP)

Replace PCB

No

Have PCB some consume?

No

If the PCB haven't any consume we should do it Wdog, make a shortcut in R987, have some consume now?

No

Yes

Replace U900 (PCAP)

Replace PCB

Yes

Go to
"A"
pag 4



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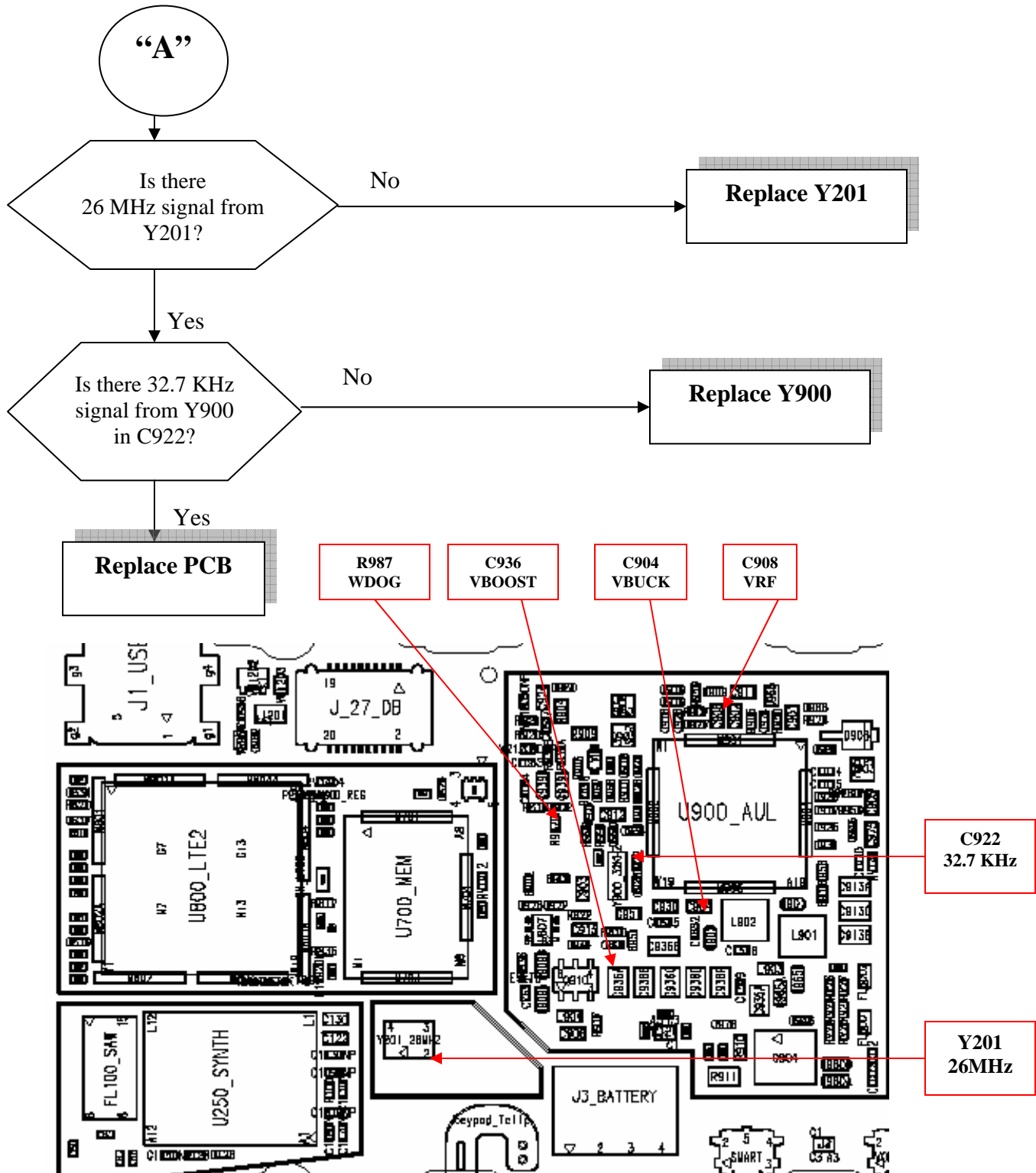
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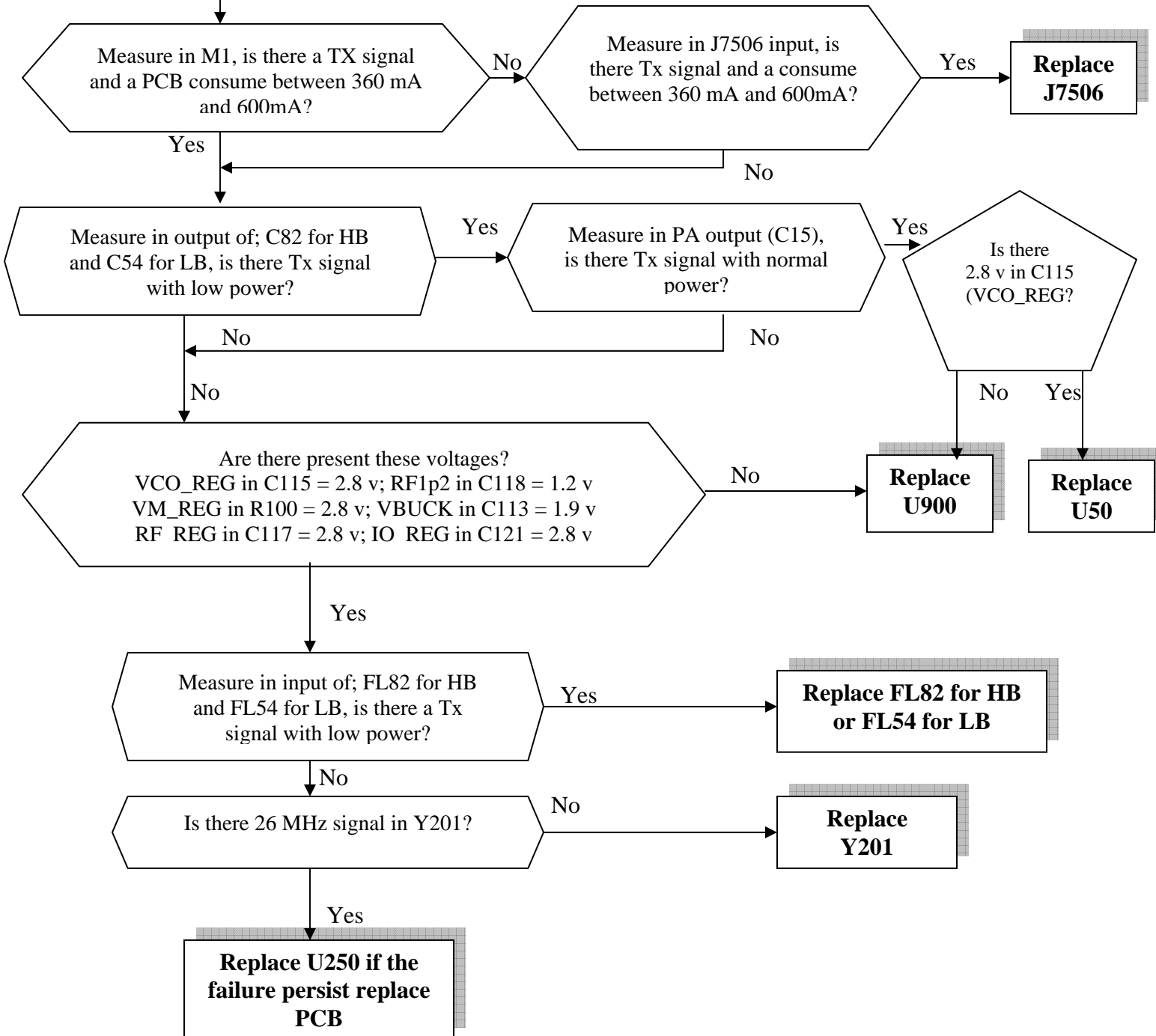
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Connect the PCB to Radiocomm program with data cable (SKN6371A) to USB and power supply with an external power supply 4.2 v.
Let radio transmit on GSM900 using Repair Studio/Radiocomm

No Tx





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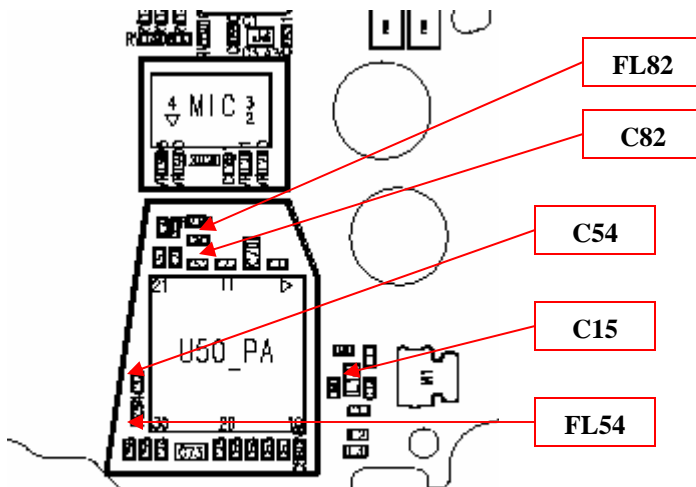
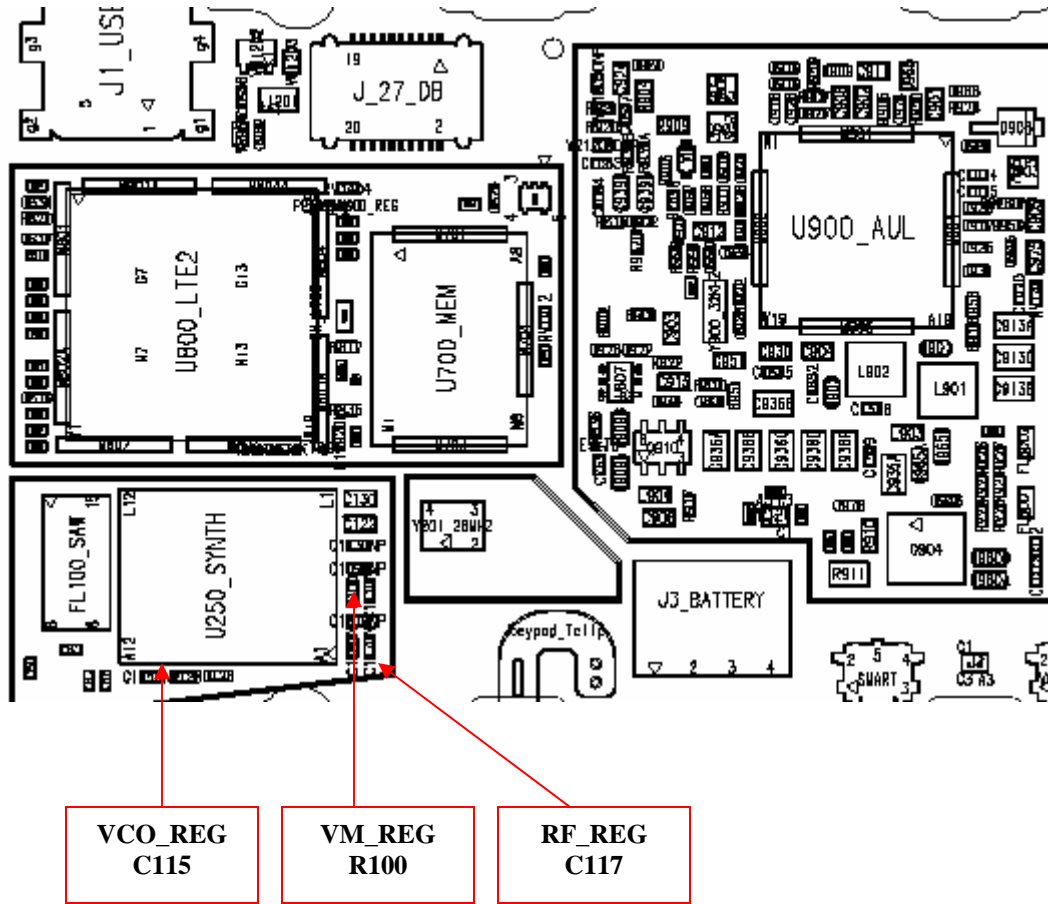
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Connect the PCB to Radiocomm program with data cable (SKN6371A) to USB and power supply with an external power supply 4.2 v.
Inject a RF from Test Set

No Rx

