



MOTOROLA

Personal Communications Sector

**GSM
Service Support
Level 3 Authorized**



GSM Service Support

Training - Documentation - Engineering



C168

**Level 3
Debug Guide
10/31/05
V1.0**

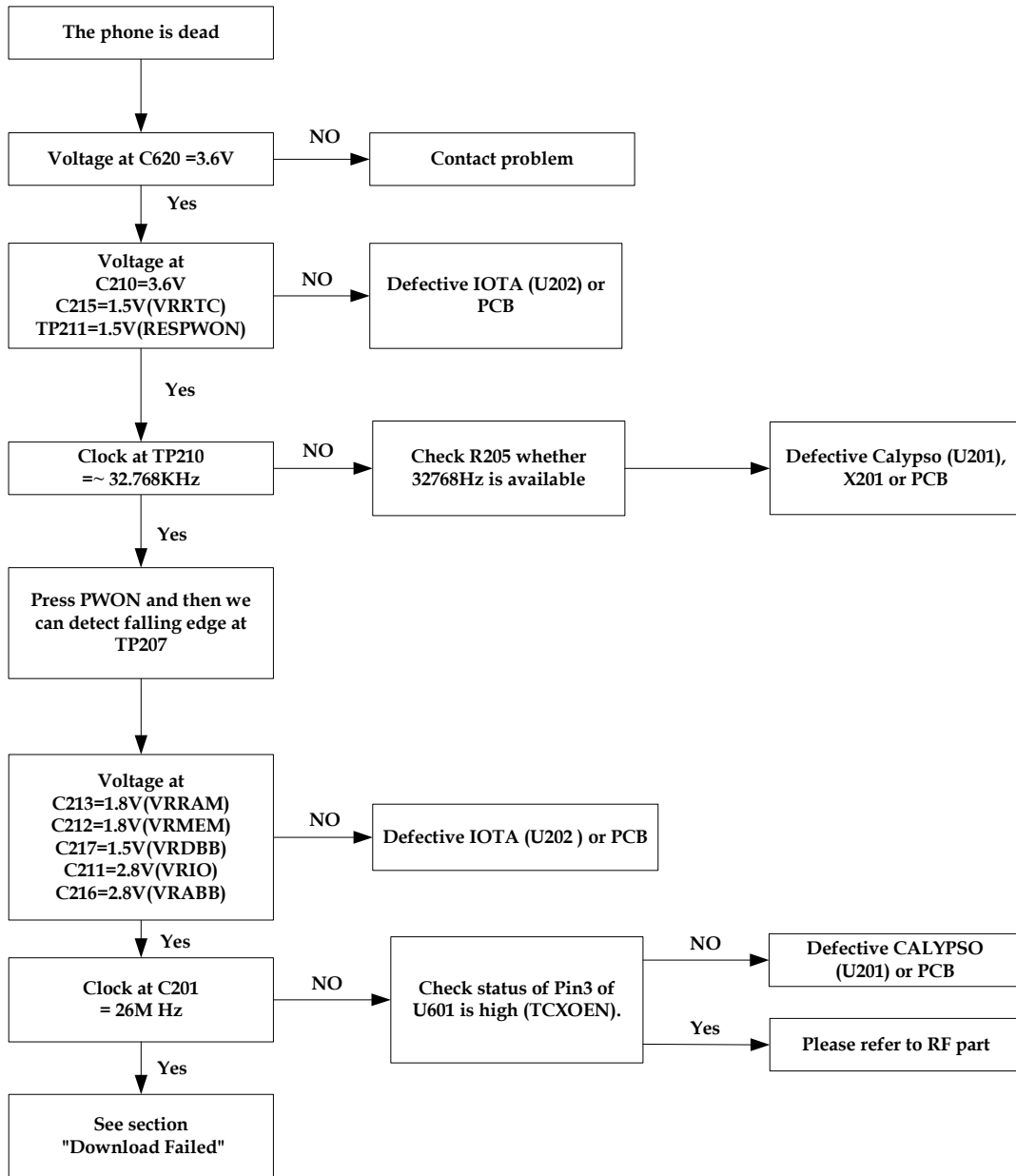
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1. Debug guide

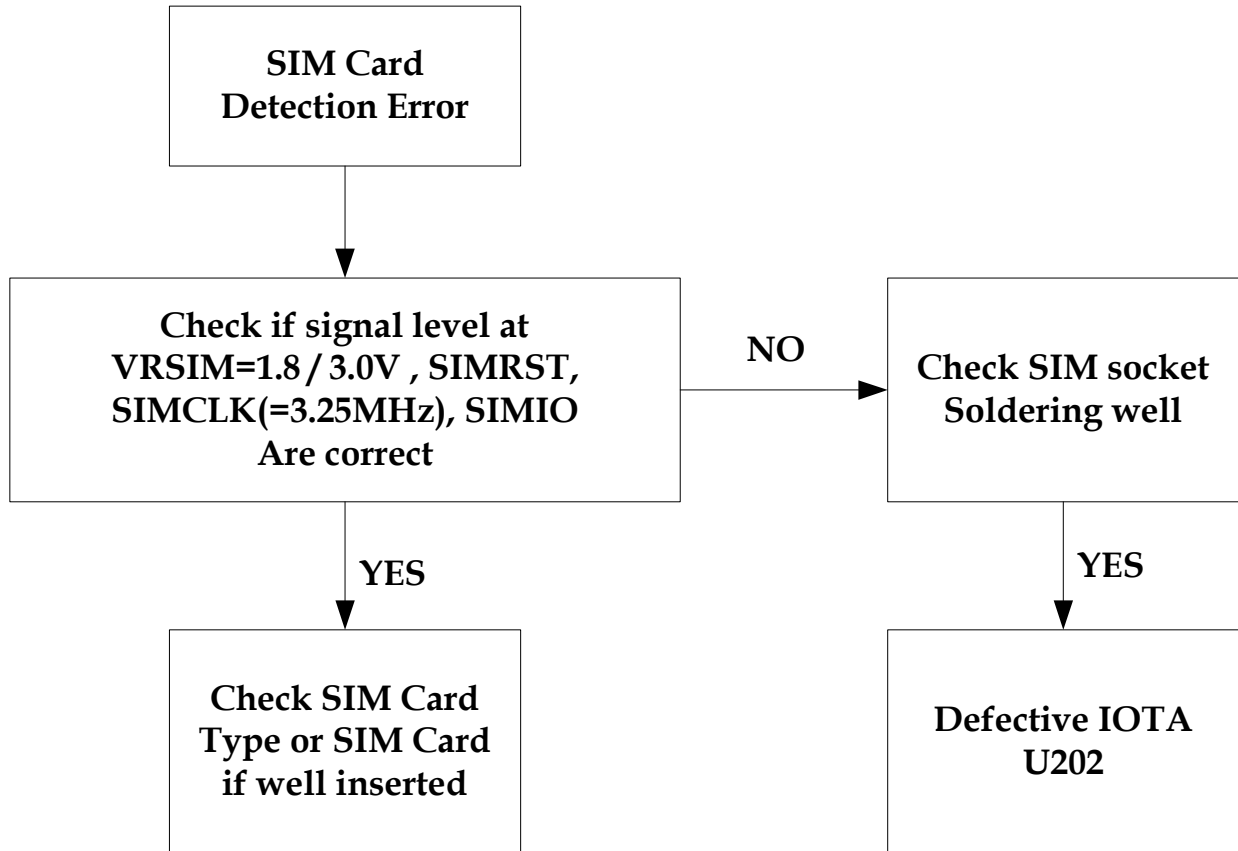
1.1 Baseband circuit Debug guide

1.1.1 Phone is Dead



Faulting Finding Chart of “Phone is Dead”

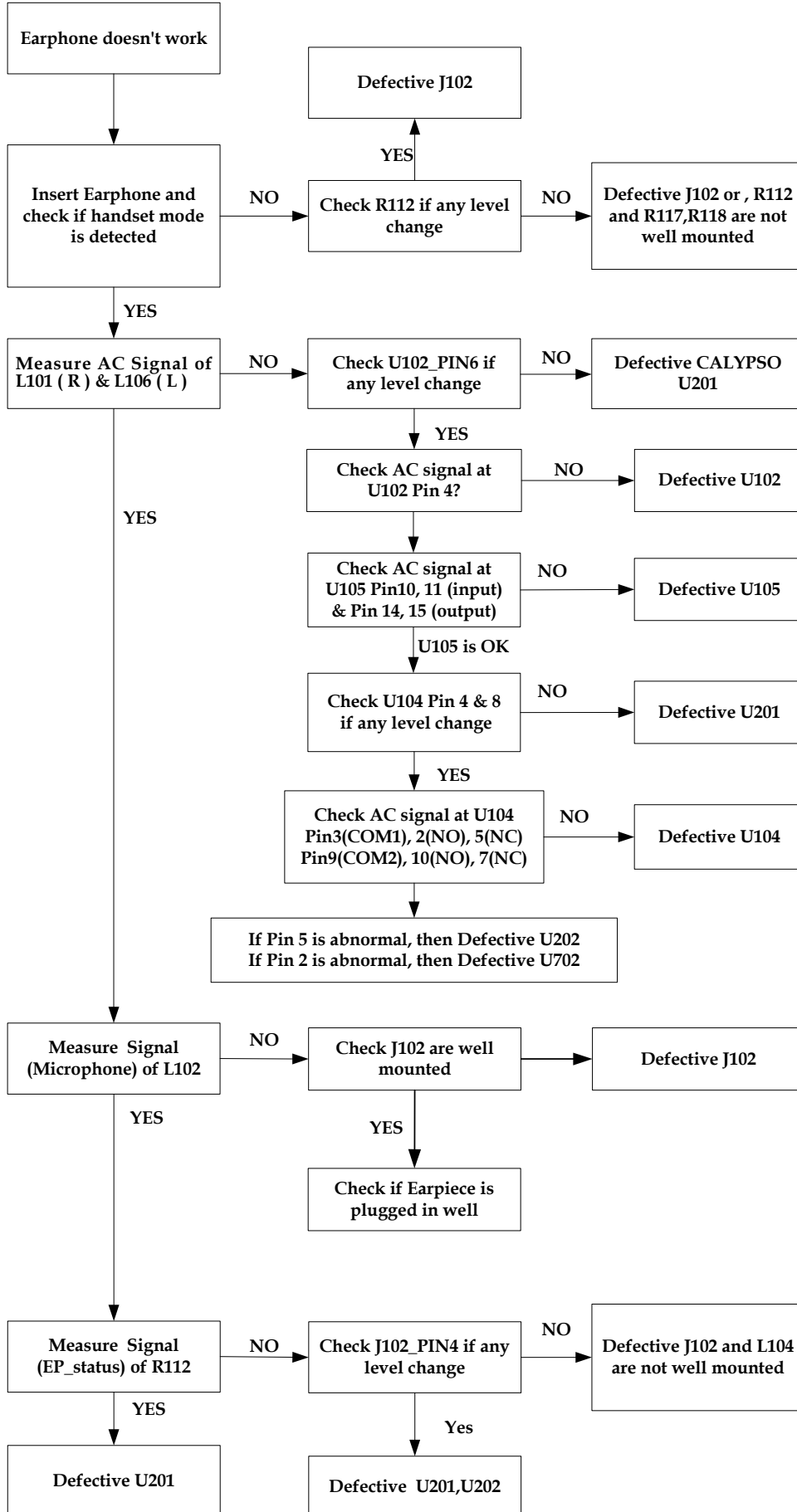
1.1.2 SIM Card Detection Error



Fault Finding Chart of "SIM Card Error"

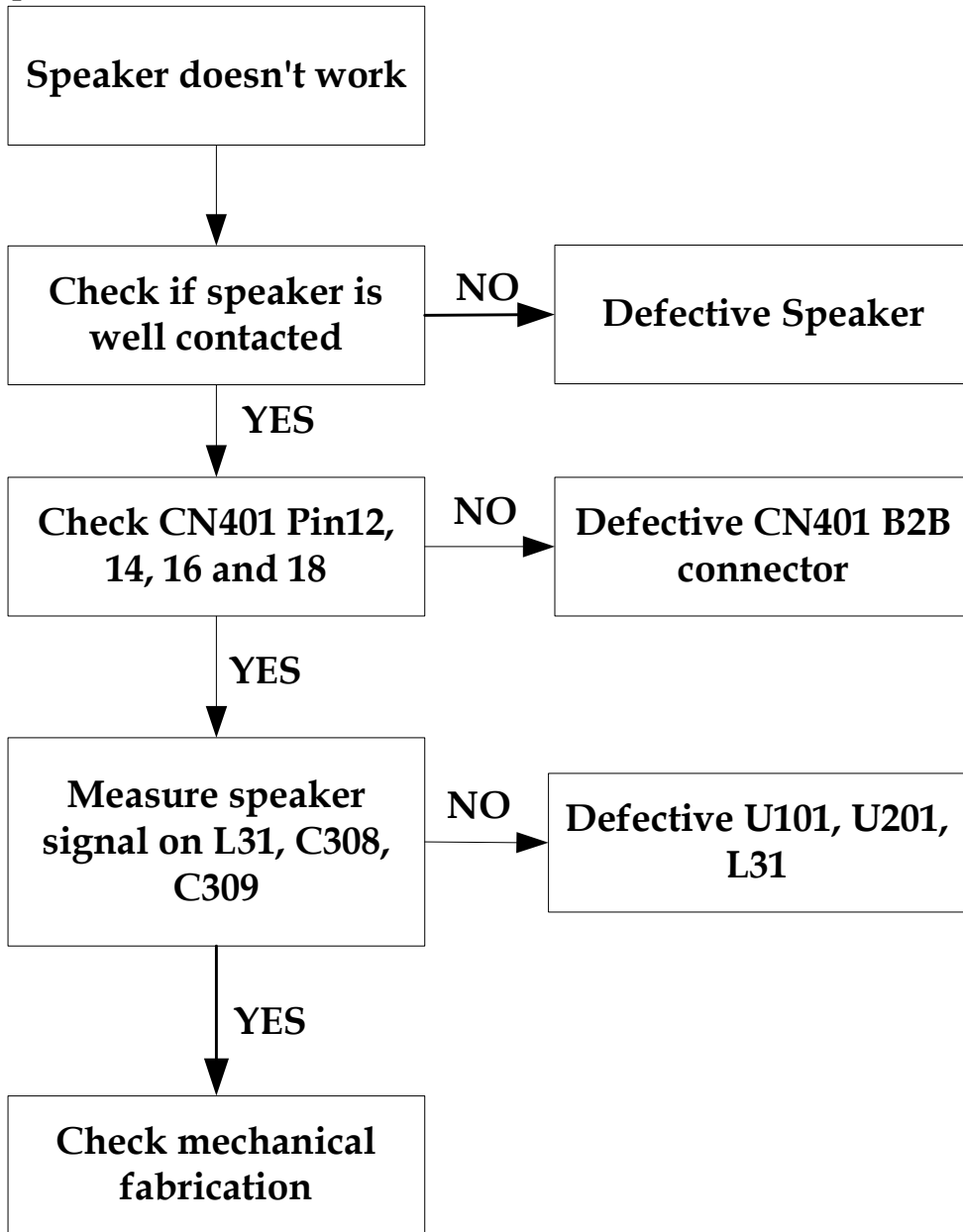
1.1.3 Audio Fail

1.1.3.1 Headset Fail



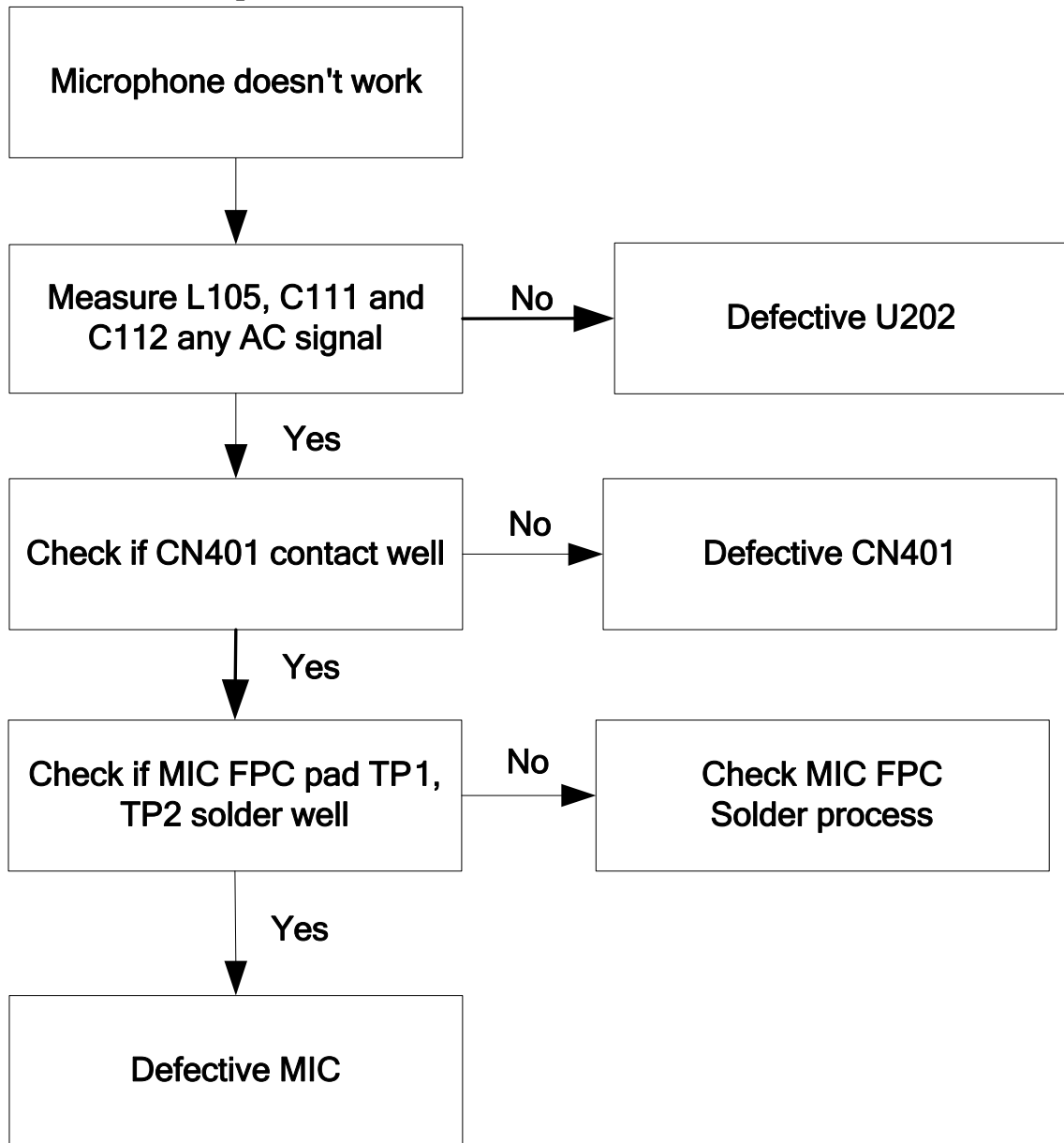
Fault Finding Chart of "Headset fail"

1.1.3.2 Speaker Fail



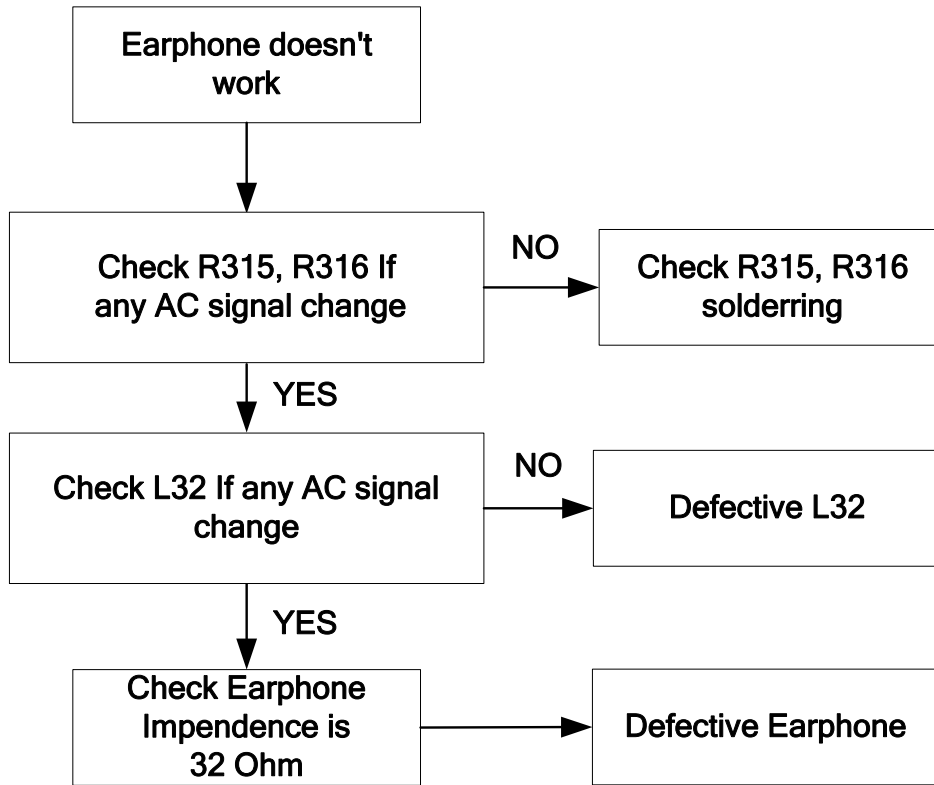
Faulting Finding Chart of "Speaker fail"

1.1.3.3 Handset Microphone Fail



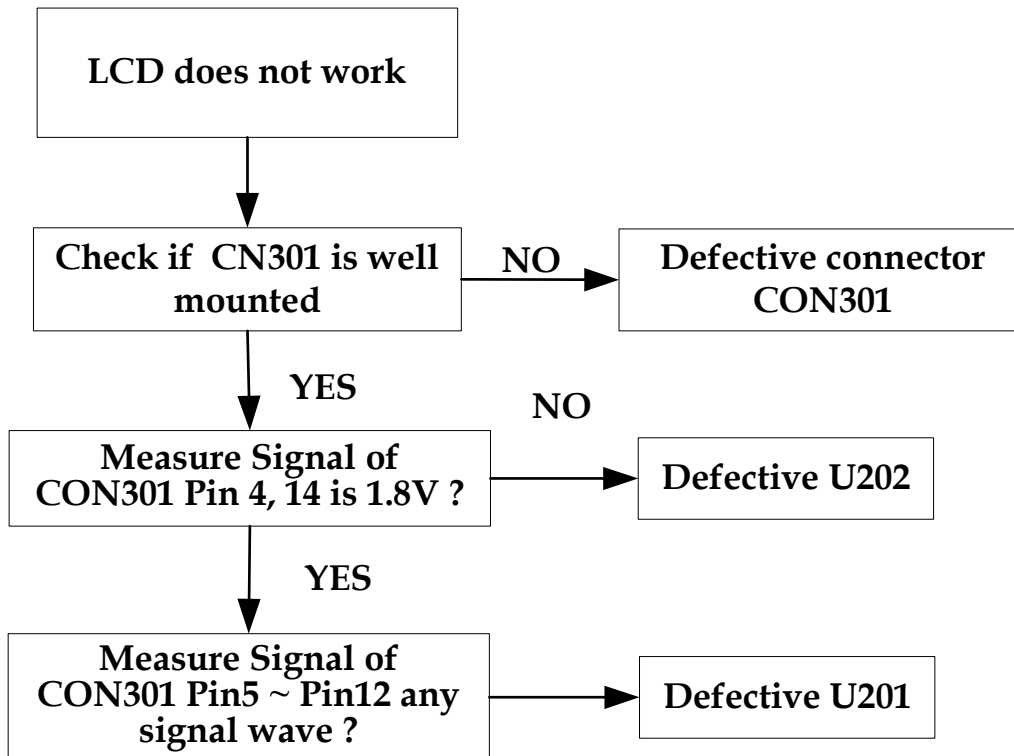
Faulting Finding Chart of "Microphone fail"

1.1.3.4 Earphone Speaker Fail



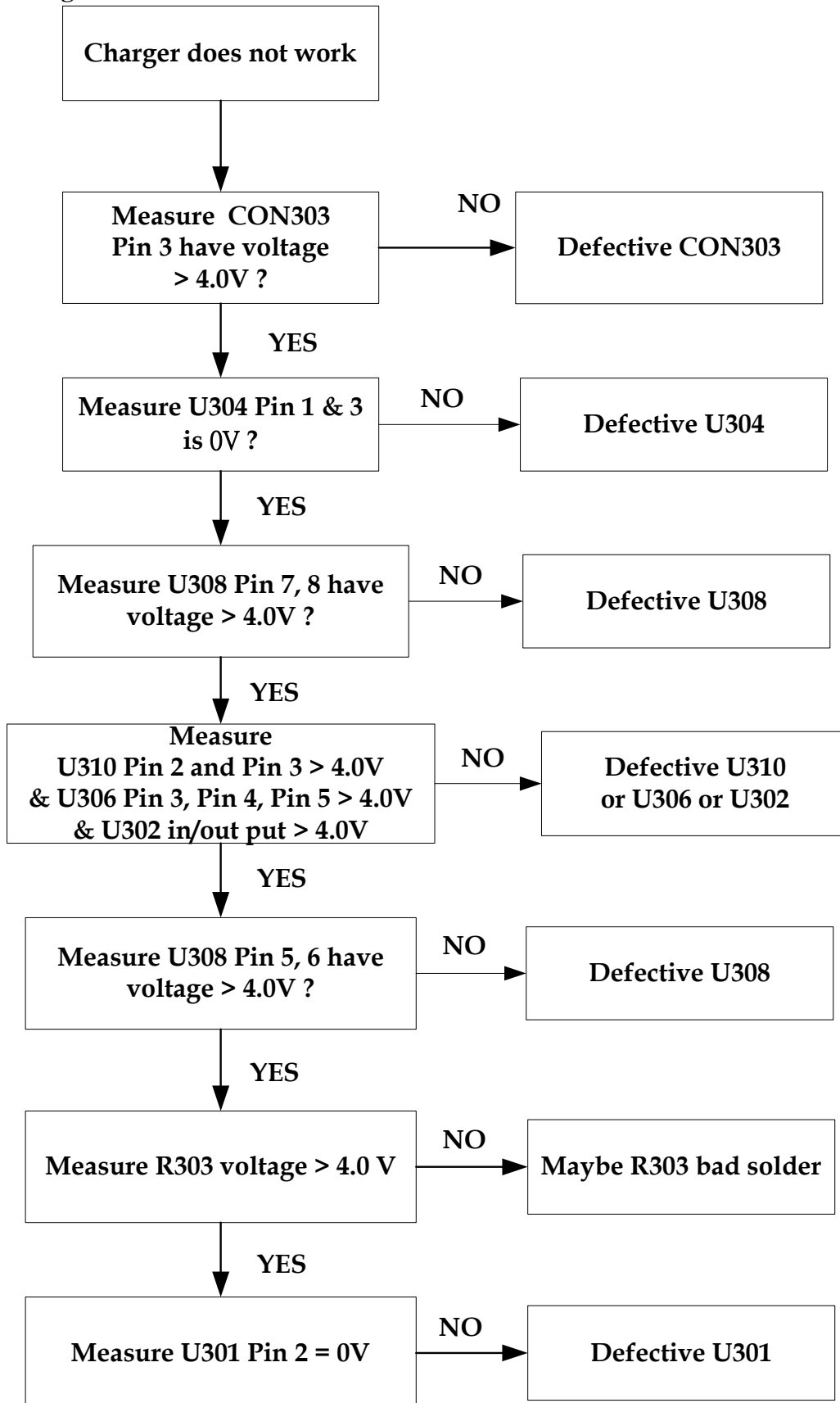
Faulting Finding Chart of "Receiver fail"

1.1.4 LCM Fail



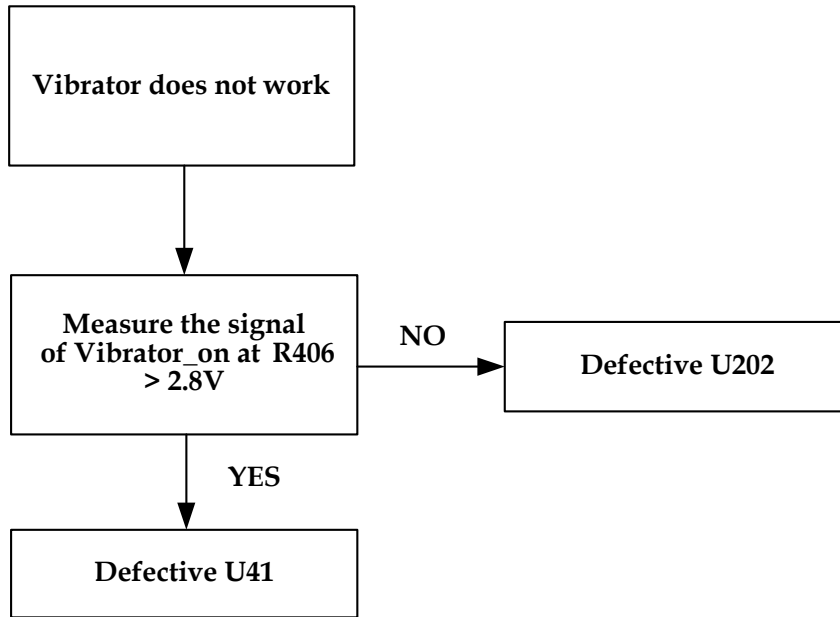
Faulting Finding Chart of "LCD fail"

1.1.5 Charger Fail



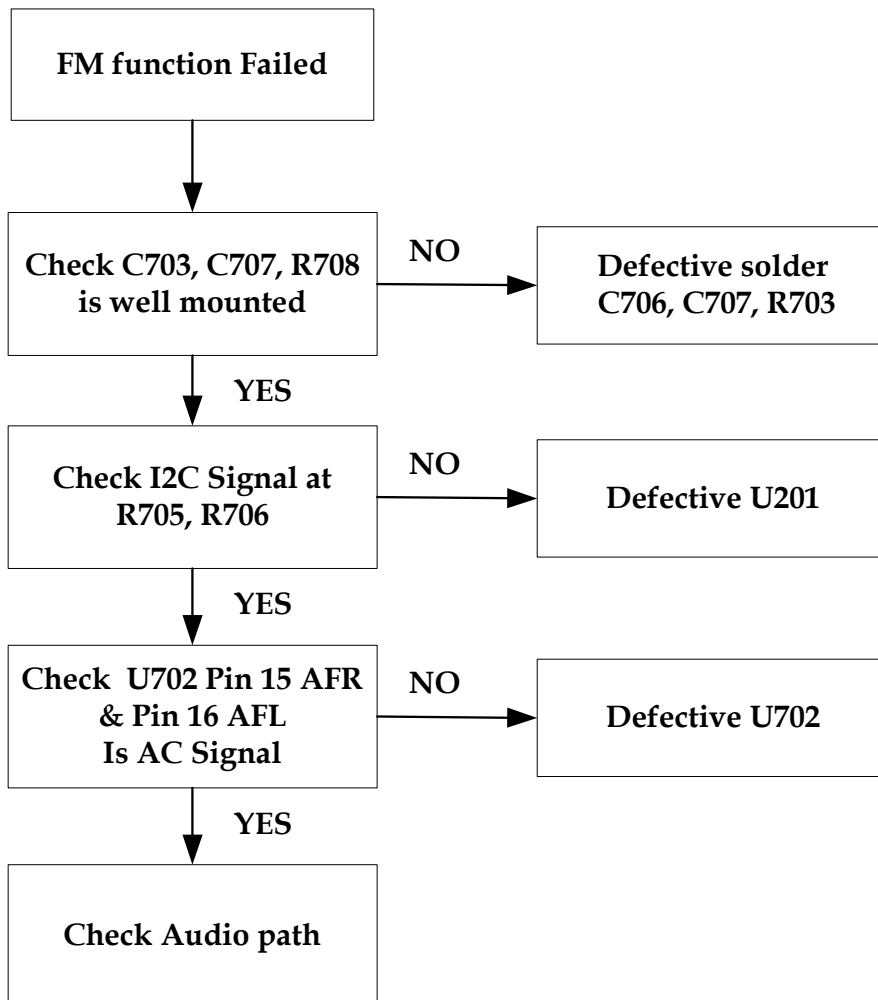
Faulting Finding Chart of “Charger fail”

1.1.6 Vibrator Fail



Faulting Finding Chart of "Vibrator failed"

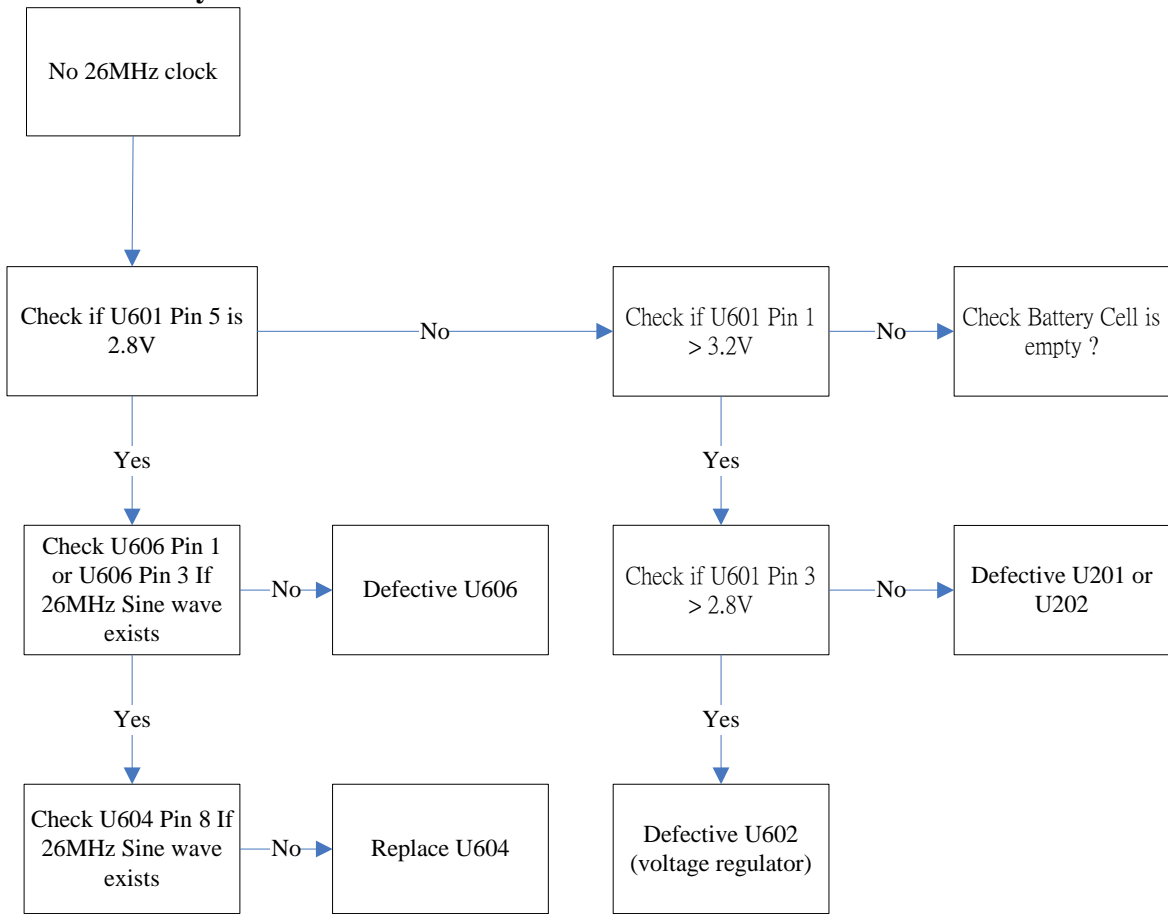
1.1.7 FM function Fail



Faulting Finding Chart of "FM function faults"

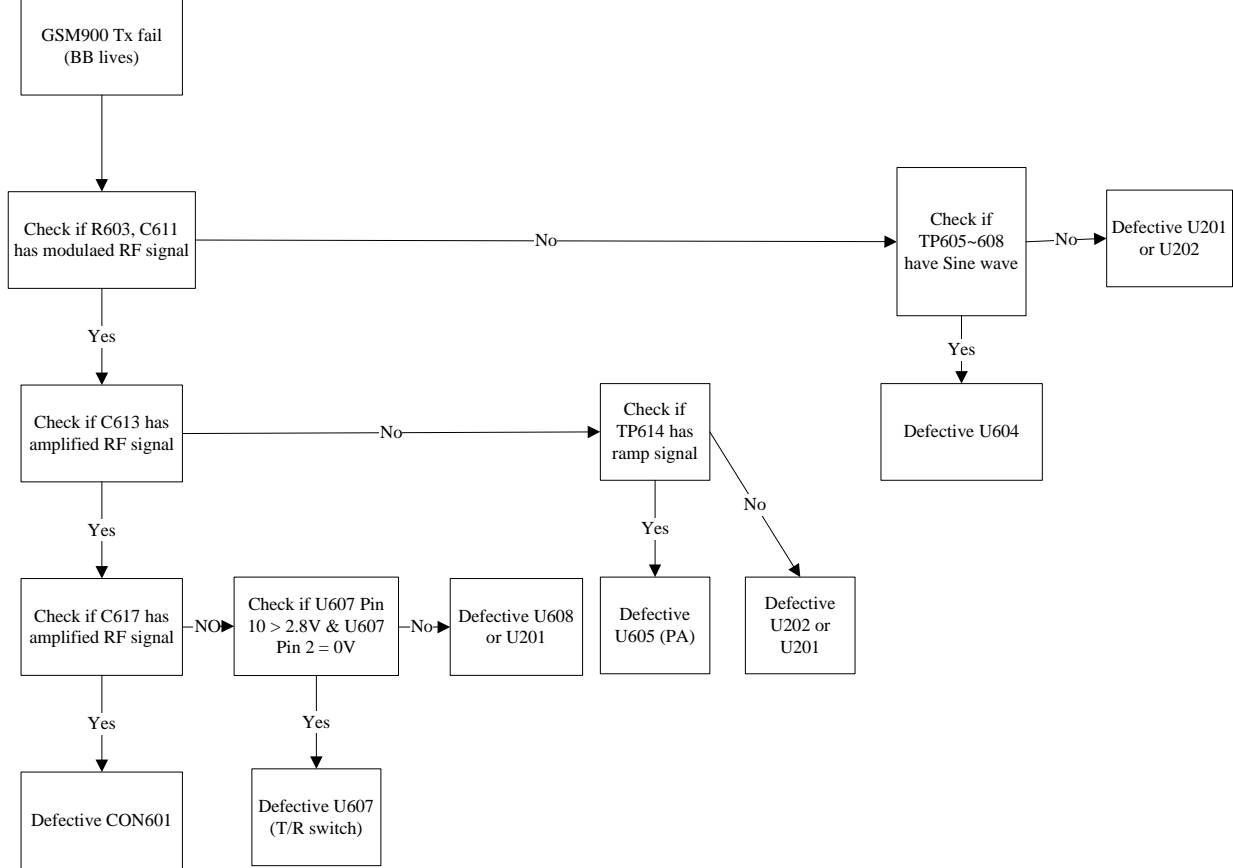
1.2 Radio Frequency circuit troubleshooting

1.2.1 26MHz System clock fail



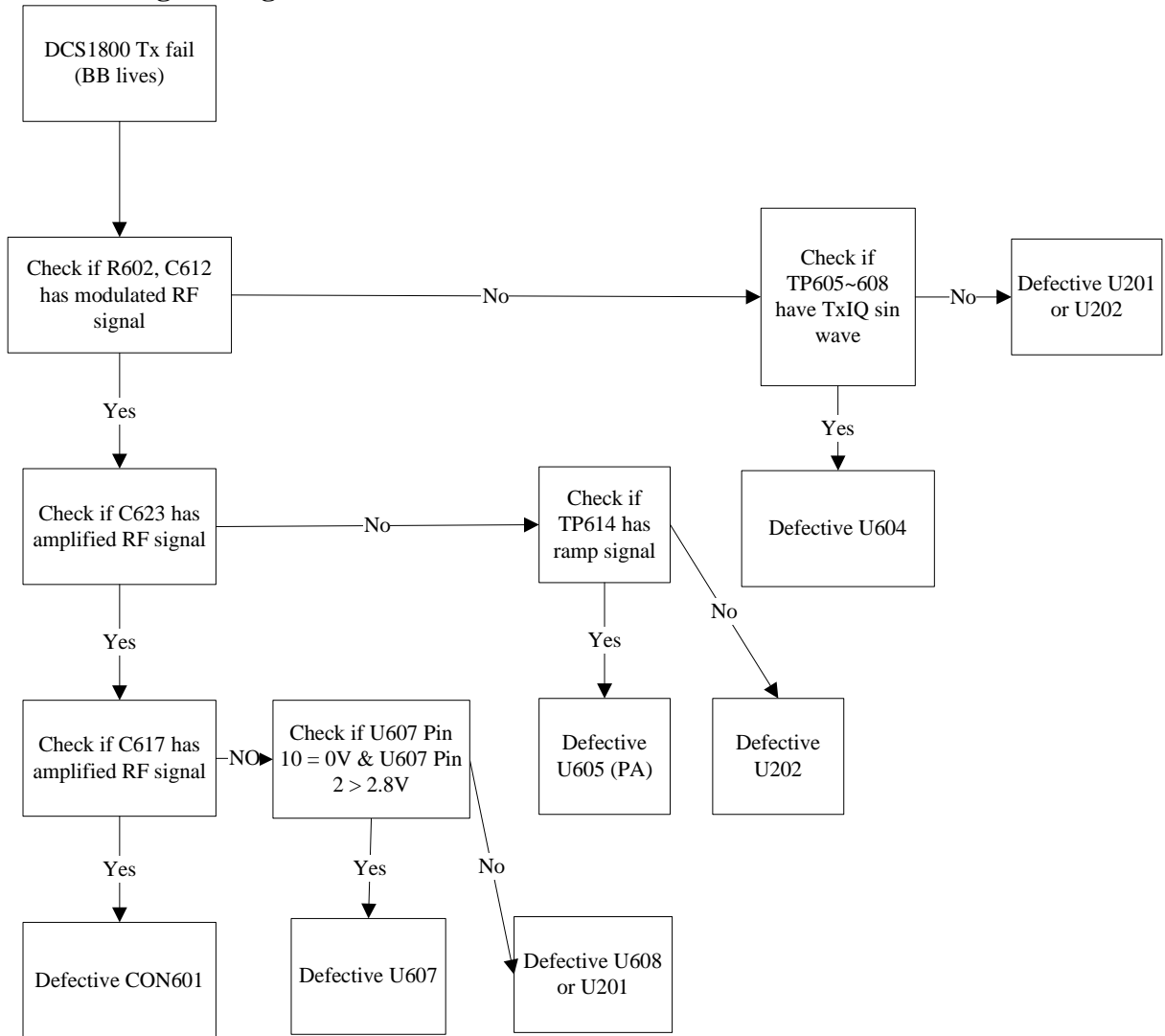
Fault Finding chart of 26MHz clock part

1.2.2 RF signal diagram in GSM900 Tx mode



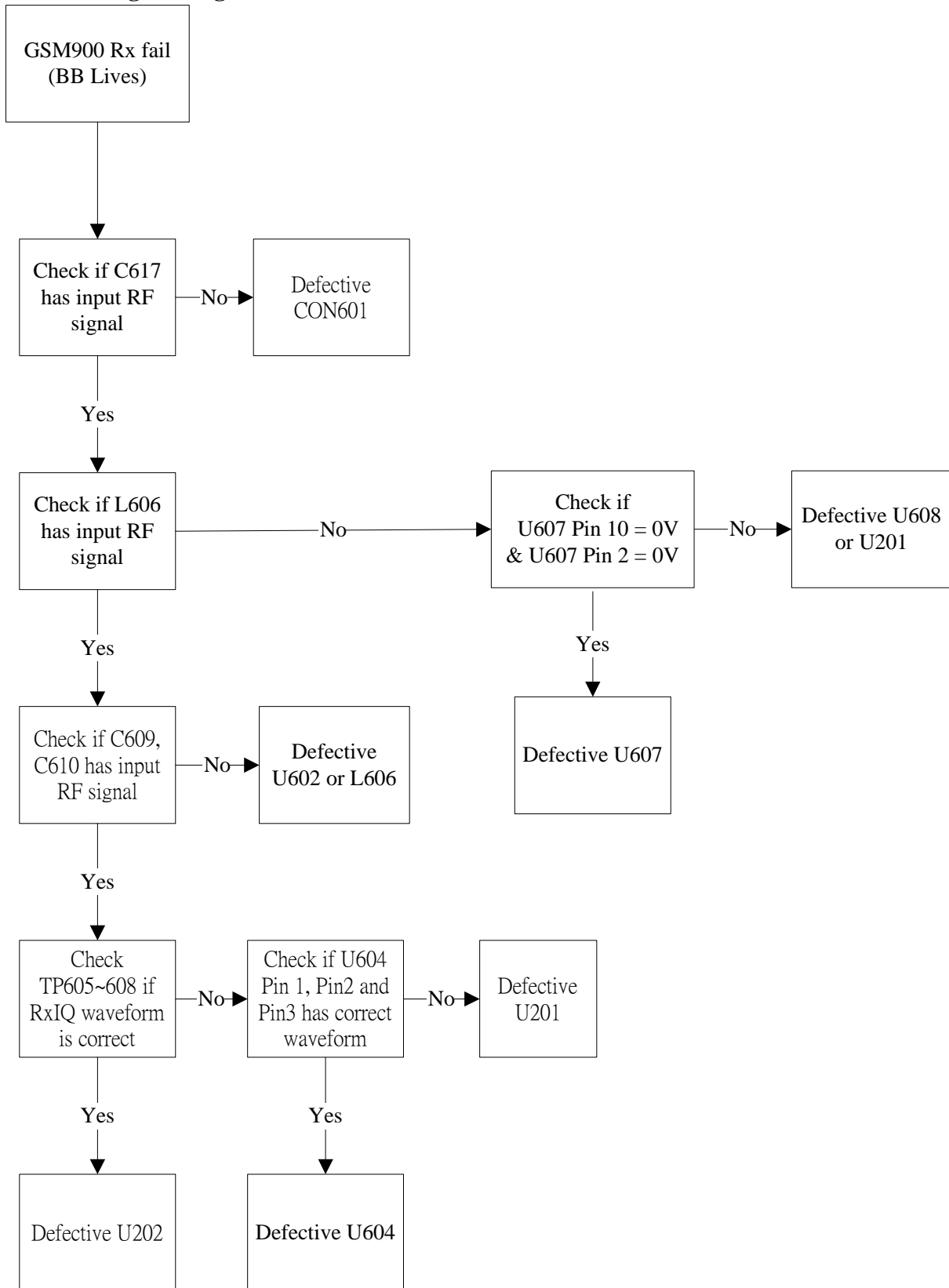
Fault Finding chart of GSM900 Tx part

1.2.3 RF signal diagram in DCS1800 TX mode



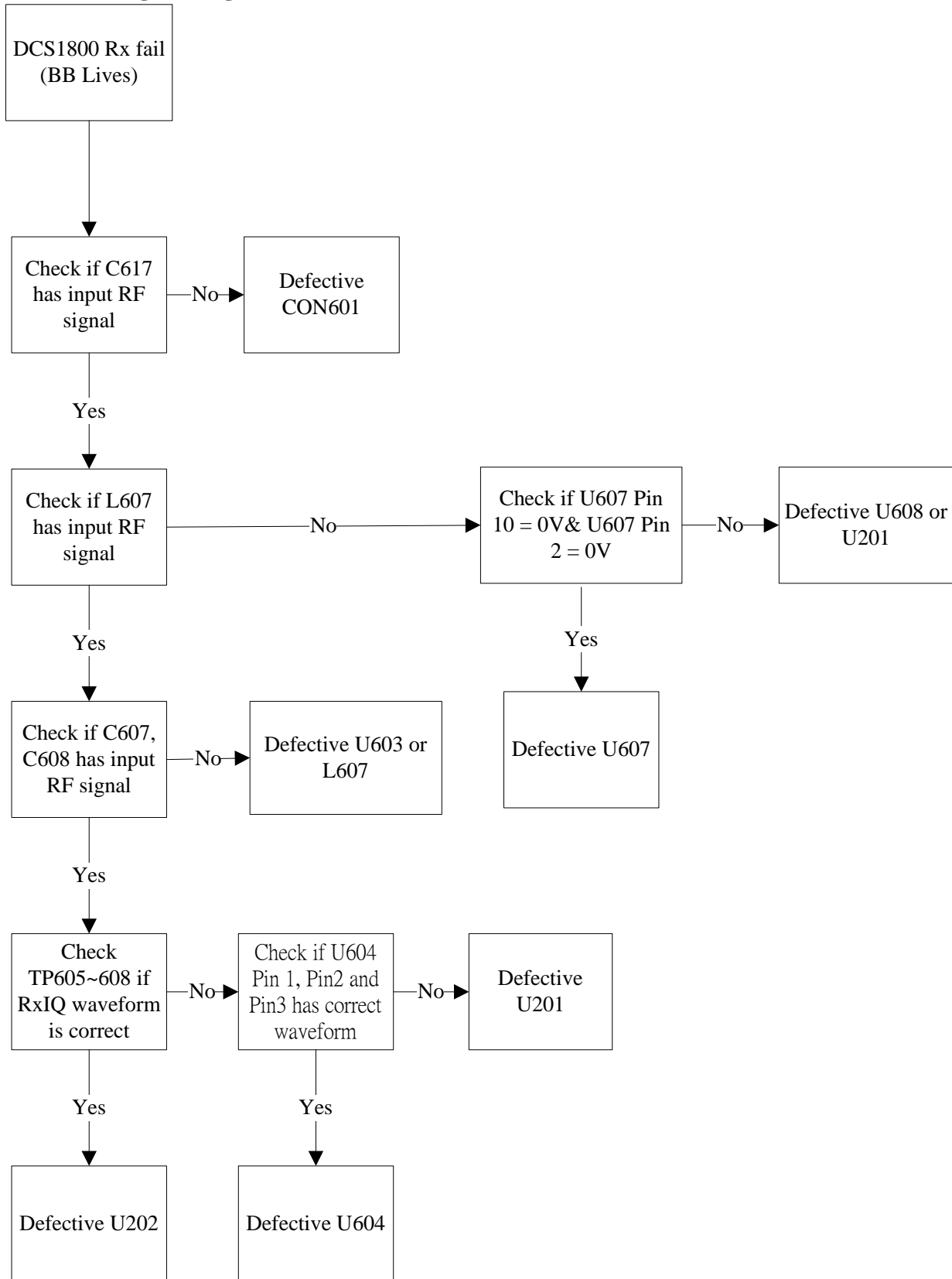
Fault Finding chart of DCS1800 Tx part

1.2.4 RF signal diagram in GSM900 Rx mode



Fault Finding chart of GSM900 Rx part

1.2.5 RF signal diagram in DCS1800 RX mode



Fault Finding chart of DCS1800 Rx part