

Turn up

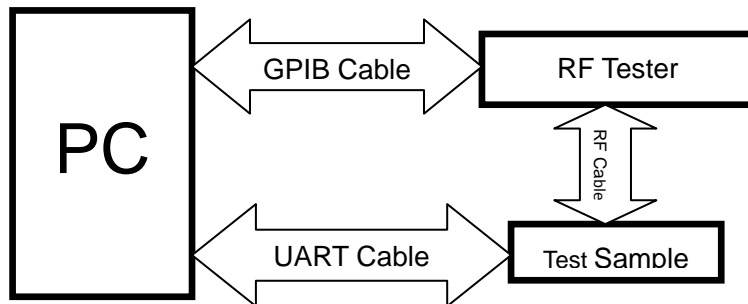


Figure 1

1 Adjustment of RF Output Power:

- (1) The equipment setup as shown in Figure 1.
- (2) Operation of PC adjusts equipment.
- (3) Use RF Engineering Tools at PC side.

Select GSM850 Band:

- 1) Set GSM850 Band.
- 2) Set ARFCN: 190
- 3) TX ON.
- 4) Adjust the power to 33dBm (Power control level: PCL=5) by PA DAC value.
- 5) Repeat 4) for 15 times, and adjust the power level to 31dBm, 29dBm, 27dBm, 25dBm, 23dBm, 21dBm, 19dBm, 17dBm, 15dBm, 13dBm, 11dBm, 9dBm, 7dBm, 5dBm.
- 6) Make 16 Ramp-Up/Ramp-Down data from the adjustment value of (5) and (6).

7) Data of 5) and 6) is written to flash memory.

8) The power output tolerance in GSM850MHz is +0.5dB/- 1.5dB.

Select PCS1900 Band:

1) Set PCS Band.

2) Set ARFCN: 661.

3) TX ON.

4) Adjust the power to 30dBm (Power control level: PCL=0) by PA DAC value.

5) Repeat 4) for 15 times, and adjust the power level to 28dBm, 26dBm, 24dBm, 22dBm, 20dBm, 18dBm, 16dBm, 14dBm, 12dBm, 10dBm, 8dBm, 6dBm, 4dBm, 2dBm, 0dBm.

6) Make 16 Ramp-Up/Ramp-Down data from the adjustment value of (5) and (6).

7) Data of 5) and 6) is written to flash memory.

8) The power output tolerance in GSM1900MHz is +0.5dB/- 1.5dB.

2 Adjustment of RX Sensitivity:

(1) Select GSM850 Band:

1) Set BCCH level: -85dBm; ARFCN: 190.

2) Test sample make a call to connect RF Tester.

3) Set TCH level:-102dBm.

4) Measure BER II error at TCH ARFCN:128,190,251.

5) Turn up the RX matching circuit to make sure BER II
<2.44% at each ARFCN.

(2) Select PCS1900 Band:

1) Set BCCH level: -85dBm; ARFCN: 661.

2) Test sample make a call to connect RF Tester.

3) Set TCH level:-100dBm.

4) Measure BER II error at TCH ARFCN:512,661,810.

5) Turn up the RX matching circuit to make sure BER II
<2.44% at each ARFCN.