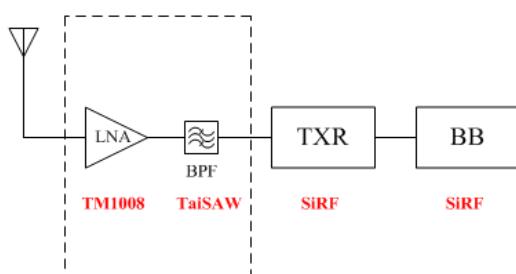
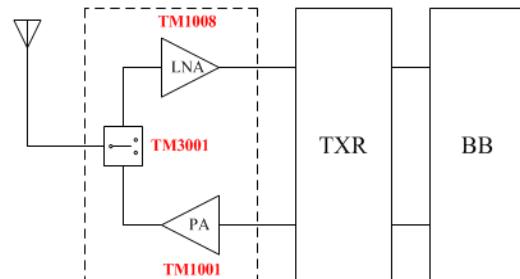
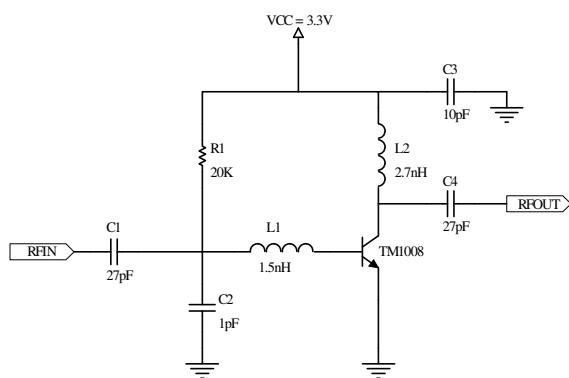
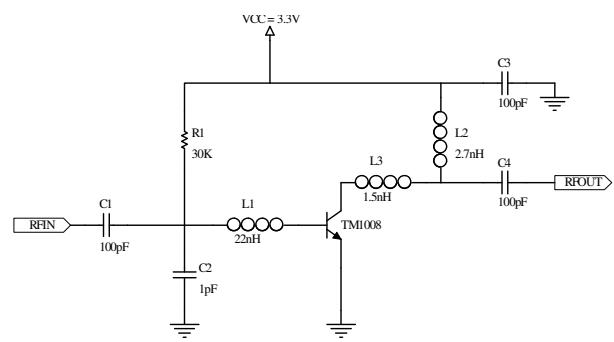


**TM1008 ~3GHz RF Transistor**
**Introduction**

1. The TM1008 is a low cost, low noise transistor and packaged in SOT343 (M02). It can be designed for Low Noise Amplifier, Gain Block or Power Driver. This product can be used in the application which frequency band is during 50MHz up to 3GHz.
2. At 1.57542GHz, the LNA is 16 dB Gain and 1.5dB NF for GPS application. For 2.4GHz, the LNA is 12dB gain and 1.8dB. And at 2.4GHz, the IC can be a power amplifier with P1dB 15dBm and current consumption is 18 mA
3. At 433MHz, Its power out can be up to 20+dBm.


**Applications and Notes**

**GPS Block Diagram**

**WLAN 802.11b/g Block Diagram**

1. It can be sued in analog and digital cellular telephones (GPS, DECT, PHS, Bluetooth, WLAN, ZigBee) RF Front end, Pagers, CATV, and Cable modem.
2. The inductor L1 can improve the NF and the feedback resistor can adjust the bandwidth and gain as well.
3. The Q of L2 will affect the power efficiency.
4. Suggested max current of the IC 25mA.


**2.4GHz Low Noise Amplifier**

**1.575GHz Low Noise Amplifier**