

**Figure 1 Block diagram of SiGe BiCMOS transceiver RFIC.**

<b>Power Supply</b>	<b>3.3V</b>
<b>Integrated Phase Noise</b>	<b>1degree RMS</b>
<b>RX Noise Figure</b>	<b>4.5dB</b>
<b>Max RX Gain</b>	<b>88dB</b>
<b>RX Input IP3</b>	<b>-12dBm</b>
<b>TX Output Power</b>	<b>18dBm</b>
<b>Max TX Gain</b>	<b>46dB</b>
<b>Technology</b>	<b>SiGe BiCMOS</b>
<b>Package</b>	<b>97 pin LGA</b>
<b>Die Size</b>	<b>25mm<sup>2</sup></b>

**Figure 2: Summary of RF transceiver performance.**

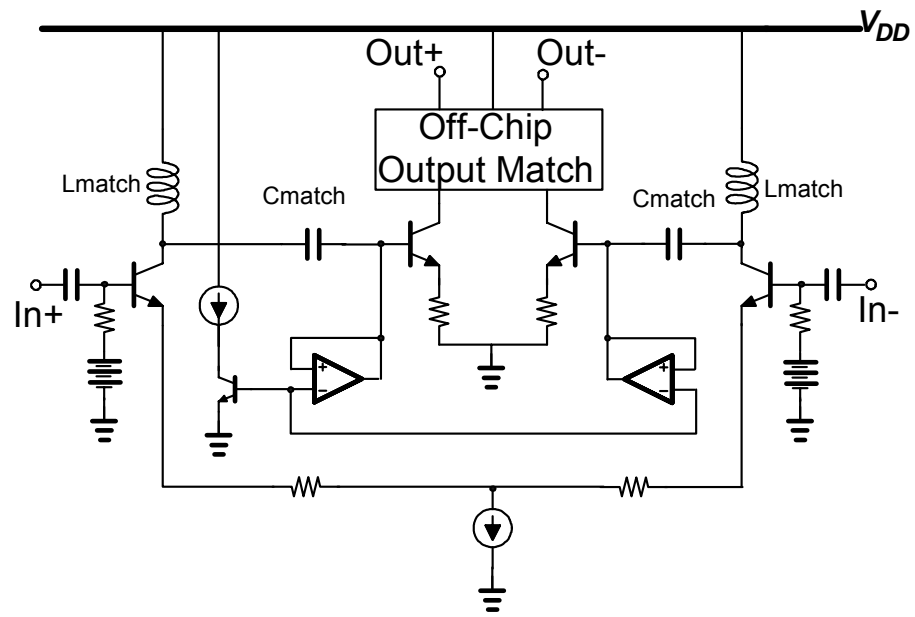


Fig 3: High power output stage and power amplifier driver.

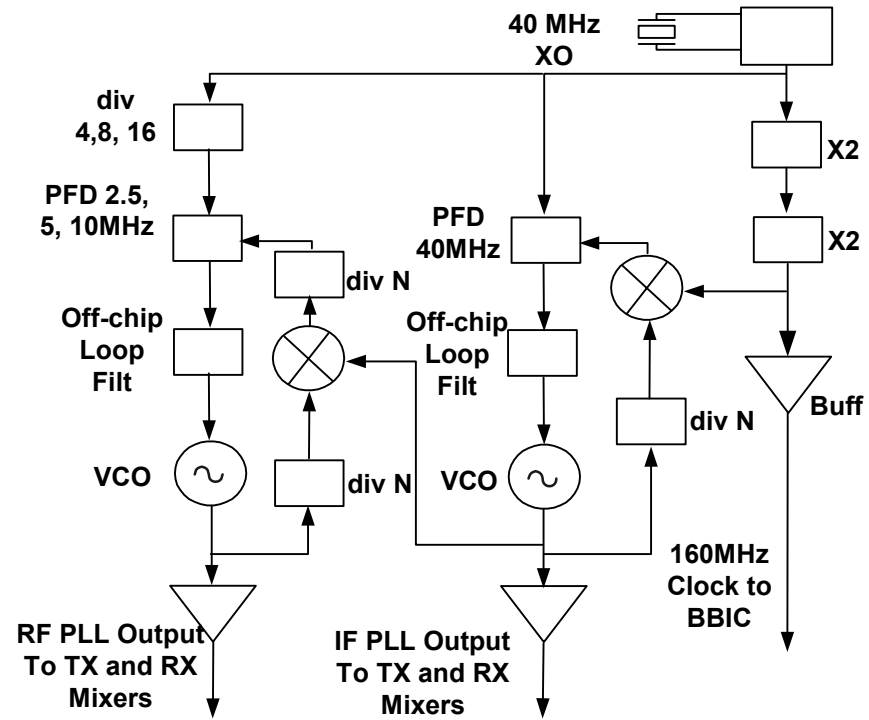


Fig 4: Block diagram of frequency synthesizer.

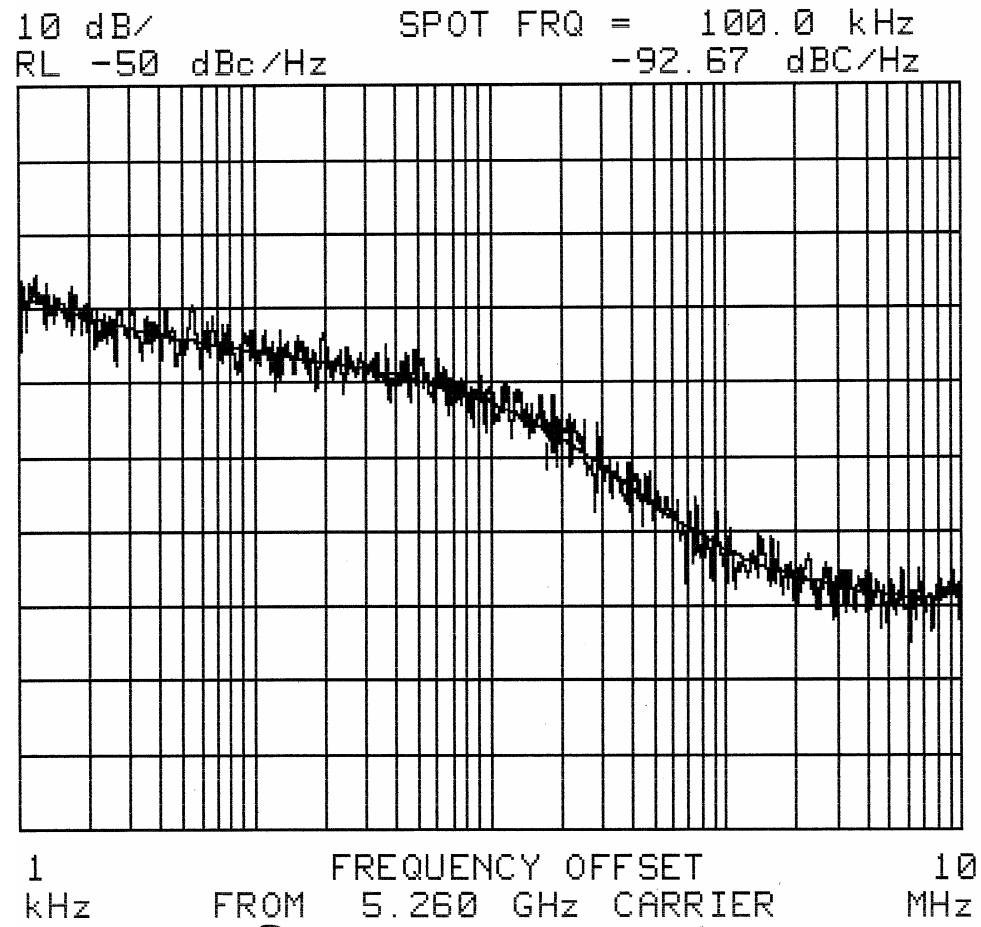


Figure 5: Phase noise plot at transmitter output

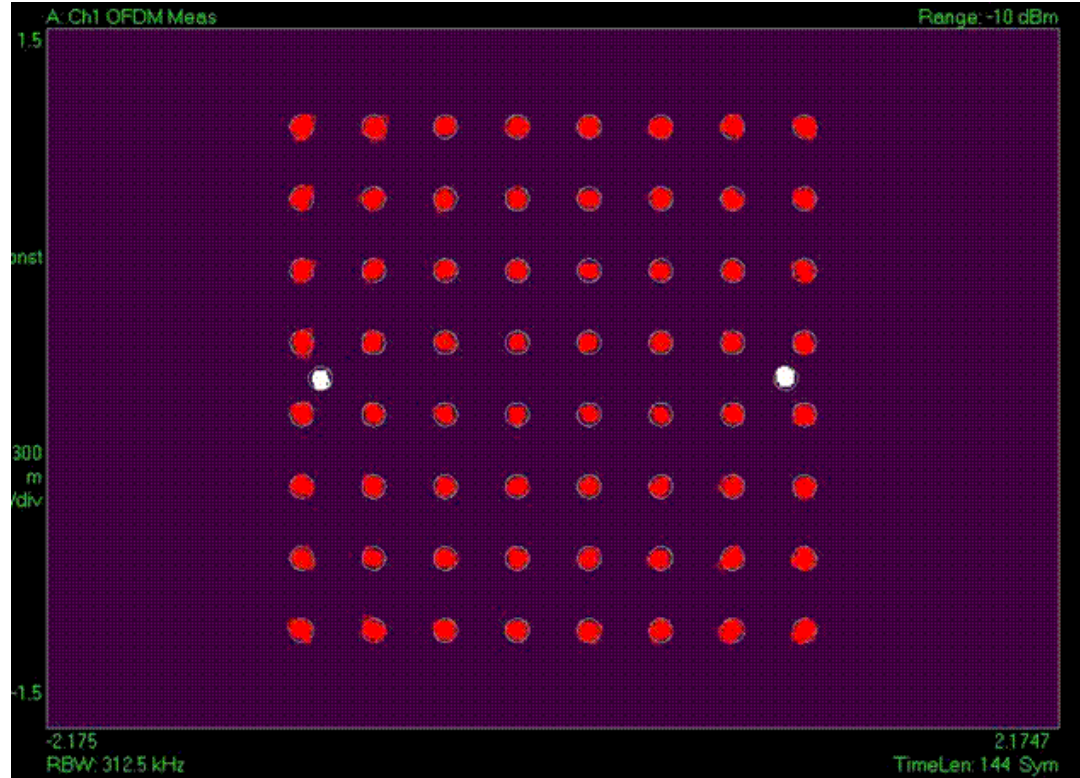
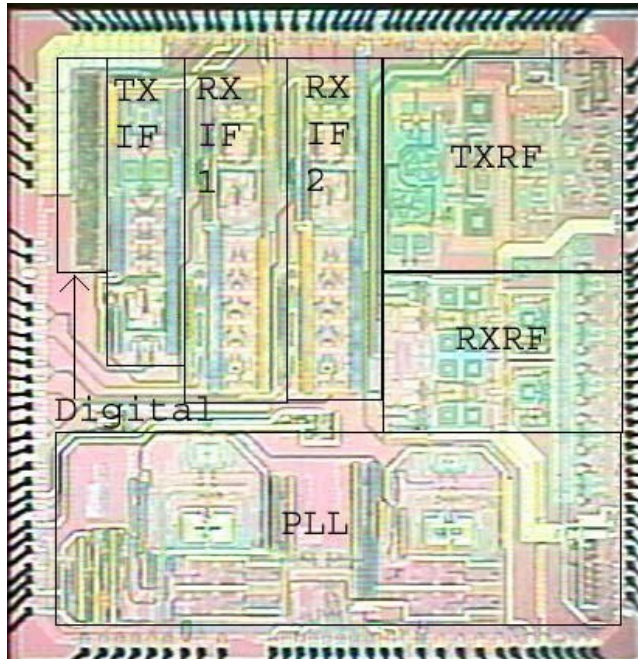


Fig 5: RFIC 64 QAM transmit constellation.



**Figure 6: Die photo of SiGe BiCMOS transceiver RFIC.**