RF Mixers (I)

General Considerations
• Performance Parameters

- Noise
- Linearity: IP3, IP2
- Voltage Conversion Gain
- Supply Voltage
- Power Dissipation

• Passive and active Mixers

• SSB and DSB Noise Figures
• **Port-to-Port Isolation**

The leakage from each port to the other may degrade the performance:

- LO-RF Feedthrough
- RF-LO Feedthrough
- LO-IF Feedthrough

And all other combinations …

• **Single-Balanced and Double-Balanced Mixers**

What is the ideal LO waveform?