

# VLSI Design

ECE 361

Spring 2011

Room No. A5-317

# General System



# RF Section

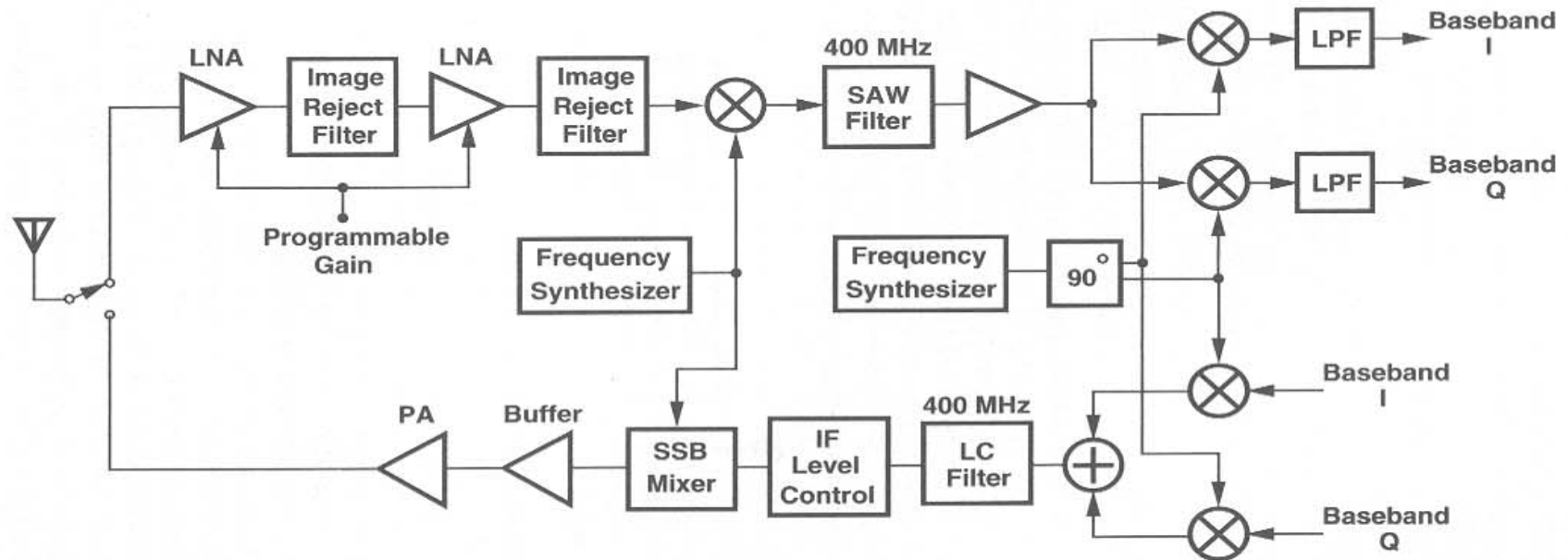
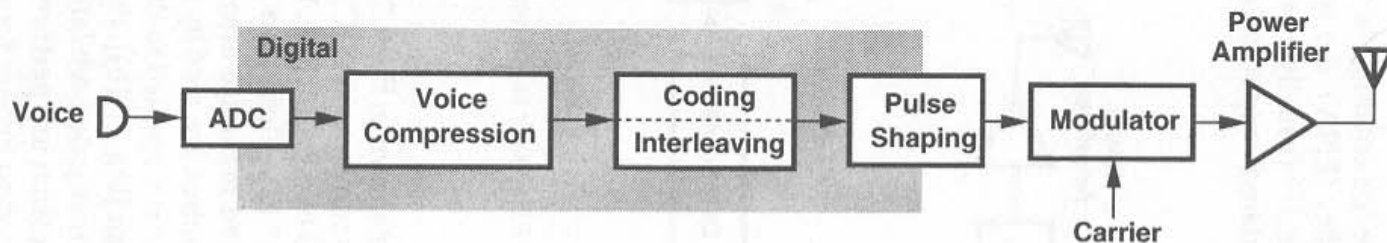
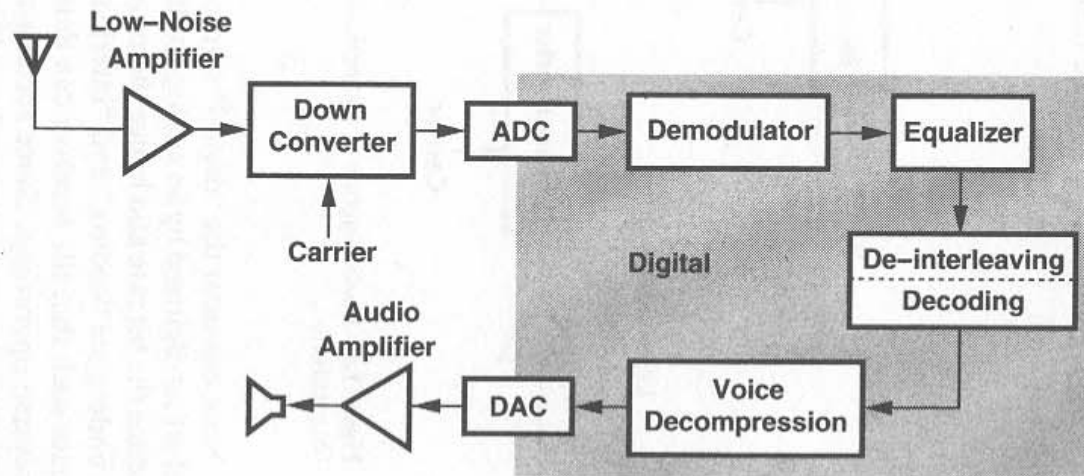


Figure 1.2 RF section of a cellphone [1]

# Digital Tx and Rx



(a)

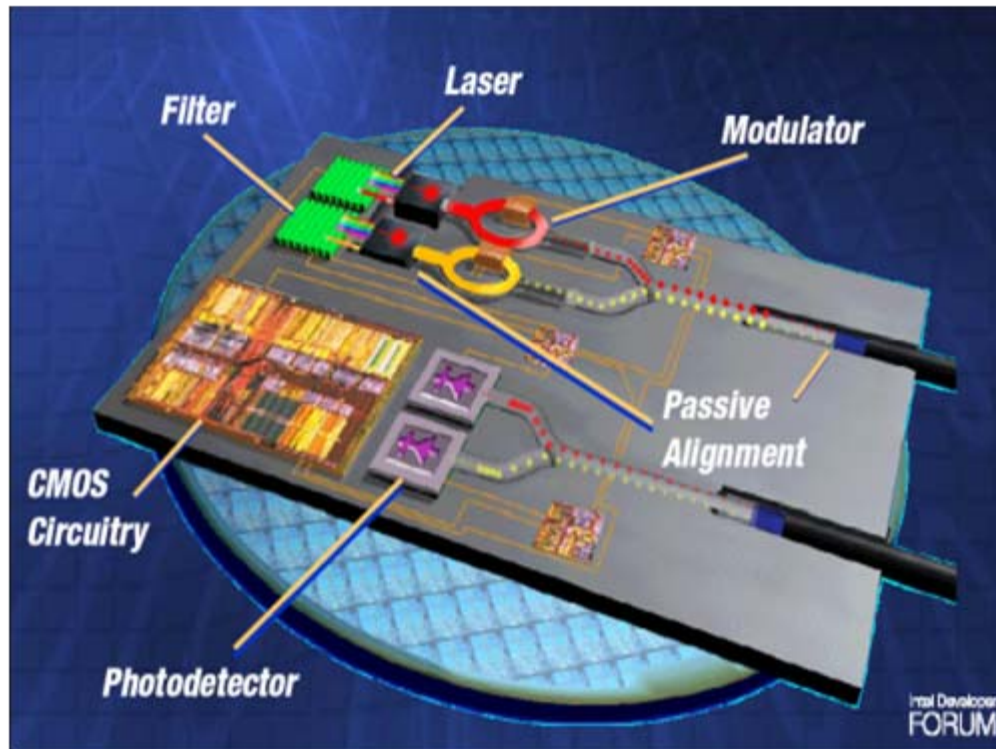


(b)

Picture taken from RF Microelectronics by Razavi

Syed - IIITH

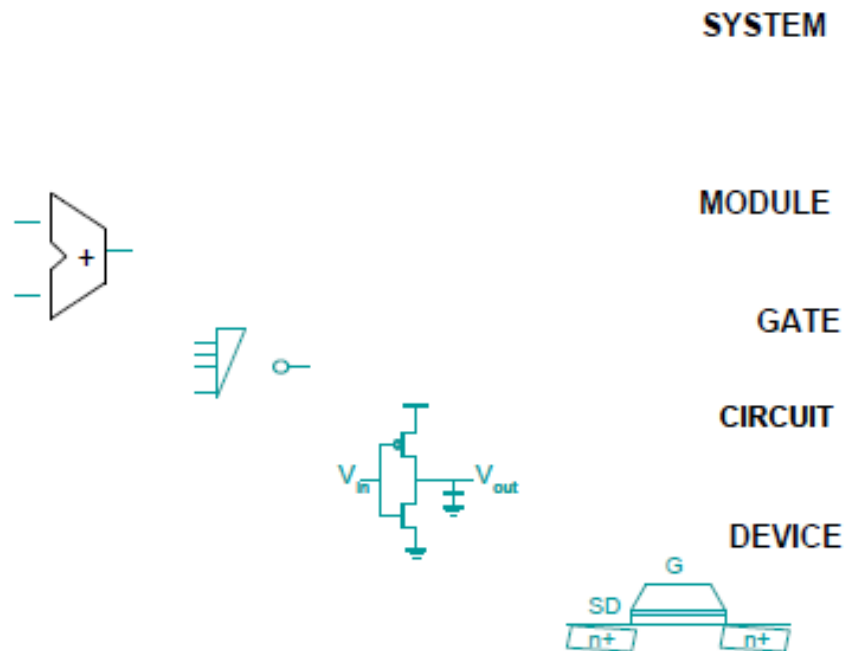
# Typical design



Picture taken from College of Optics & Photonics, UCF, Syed IJTH

# Hierarchy

## Design Abstraction Levels



# Where is VLSI

- Exponential growth in complexity
- Digital, Analog, RF, Optical, MEMS
- Computers everywhere
- Wireless, portable, low power
- Moore's Law