

Monolithic Microwave Integrated Circuit (RP 4.2.17)

- History of MMIC
- Introduction to MMICs. technologies: GaAs/Si/InP: MESFET HEMT BJT HBT
- Applications, circuit fundamentals of MIC and MMIC
- Fabrication technology
- MMIC components, active devices, passive lumped elements, microstrip elements
- Amplifier design: Amplifier biasing, reactively matched amp, feedback amp, distributed amp
- One LNA design to be carried out fully using CAD, from conceptualization to layout.
- Mixers and oscillators
- Control circuits
- Wafer layout and DRC
- On-wafer measurements
- MMIC Packaging