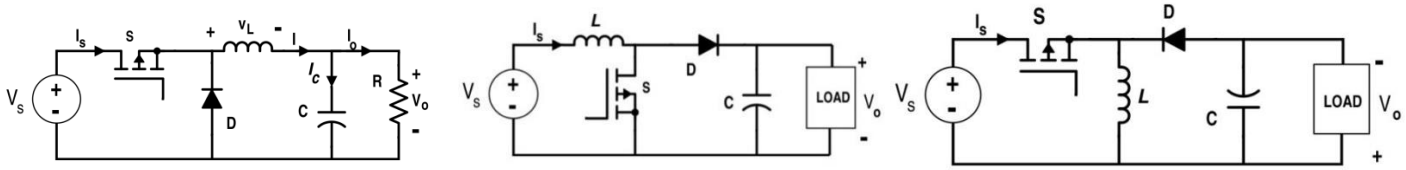
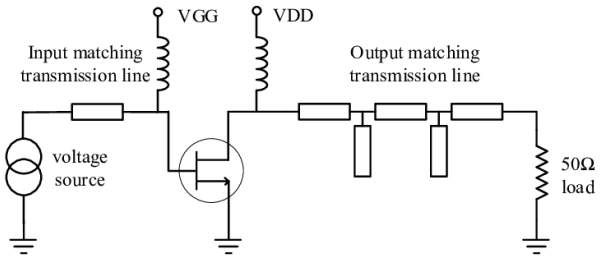
Device-circuit co-design

In this section our lab is designing the circuits which are applicable for high power applications such as Radio Frequency Power Amplifiers (RF PAs) Circuits for high power devices LDMOSs and GaN HEMTs, DC- DC Converter (Buck, Boost and Buck-Boost) Circuits, Cuk Converters, AC-DC-AC Converter Circuits, etc. Here, we are using Integrated Circuit Characterization and Analysis Program (IC-CAP) for Model Card Extraction which is used in high speed/digital, analog and power RF circuit design. For Device-Circuit Co-Design is performing by Advanced Design System (ADS) which is the industry's leading RF, microwave, Signal Integrity, and Power Integrity electronic design automation software for wireless communications and networking, aerospace and defense, and signal integrity applications. IC-CAP is support to Advanced Design System simulation.

Flow of Simulation Software Used:

Circuit Design Used:





RF PA Circuit Design