Development of a Battery Driven Dipole Antenna Test Board

Project work or BA thesis

Motivation

- Measurement tools like a near-field scanner can characterize electric devices
- For evaluation, determined test devices are necessary
- Moreover, simulation and measurement can be compared
- Battery driven advantageous – no cables needed
- PCB design for defined characteristics and good reproducibility

Tasks

- Research for literature, market available components, suitable circuits
- Definition of specifications
  - Target: 1 GHz, 10 dBm, other options
- Design and simulation of dipole antenna in CST Studio Suite
- Design of PCB in KiCad
- Simulation of PCB (Spice, and/or CST)
- Report and Presentation
- Any other aspect you want to bring in

Requirements

- Good knowledge in electromagnetics, circuits
- Ideal: Theoretische Elektrotechnik / Fields and Waves completed

Contact

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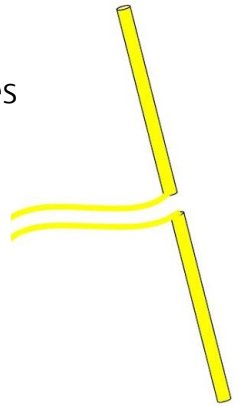
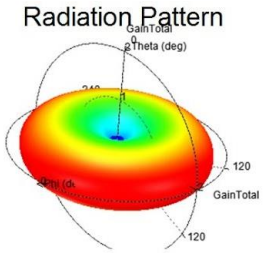
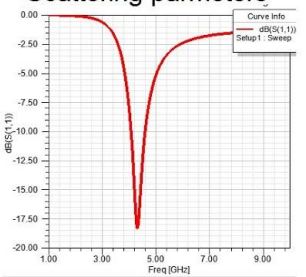
Dipole Antenna

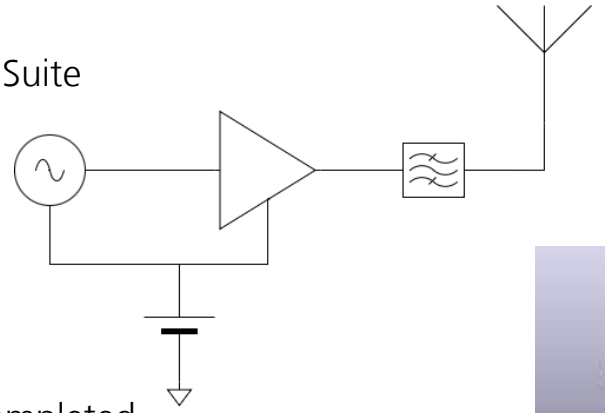


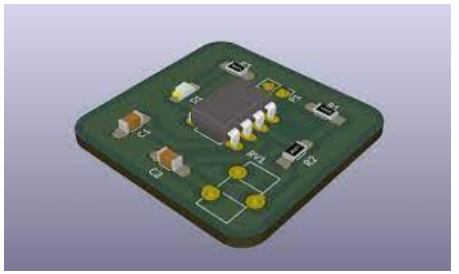
Radiation Pattern



Scattering parmeters







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