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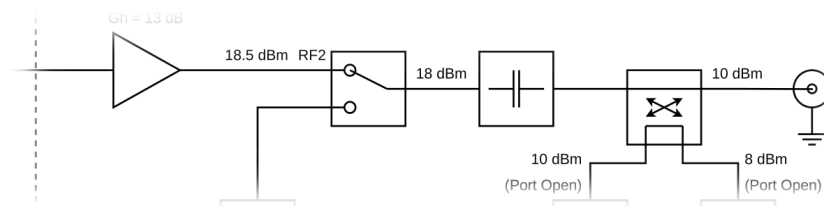
Student Work Opportunity (SHK)

RF Hardware Design

In this role you will design PCB modules and prototypes for RF systems in current research projects. The first project focuses on receive and transmit frontends for a novel portable 4-port network analyzer. If you are interested, the activity can be extended by digital signal processing and control of the designed frontends.

The whole design cycle, including schematic design, simulation, layout, measurement and documentation shall be performed. Throughout the activity there will be design reviews with a mentor to discuss relevant decisions and find potential problems in an early stage.

The software used for PCB design is KiCad. The simulation of low-frequency schematics can be performed in LTspice or similar. RF circuits are simulated in AWR esign Environment. For assembly and measurement of the prototypes, access to the laboratories of the Chair of Radio Frequency and Photonics Engineering is granted. PCs with the required software can be provided as part of the chairs PC pool.



Focus of work

- Schematic and layout design
- Circuit simulation
- Measurement, test and verification
- Documentation of the development

Counterpart

Fabian Geissler
Barkhausen-Bau, Room IV63
+49 351 463-36913
fabian.geissler@tu-dresden.de