Bachelor / Master Thesis

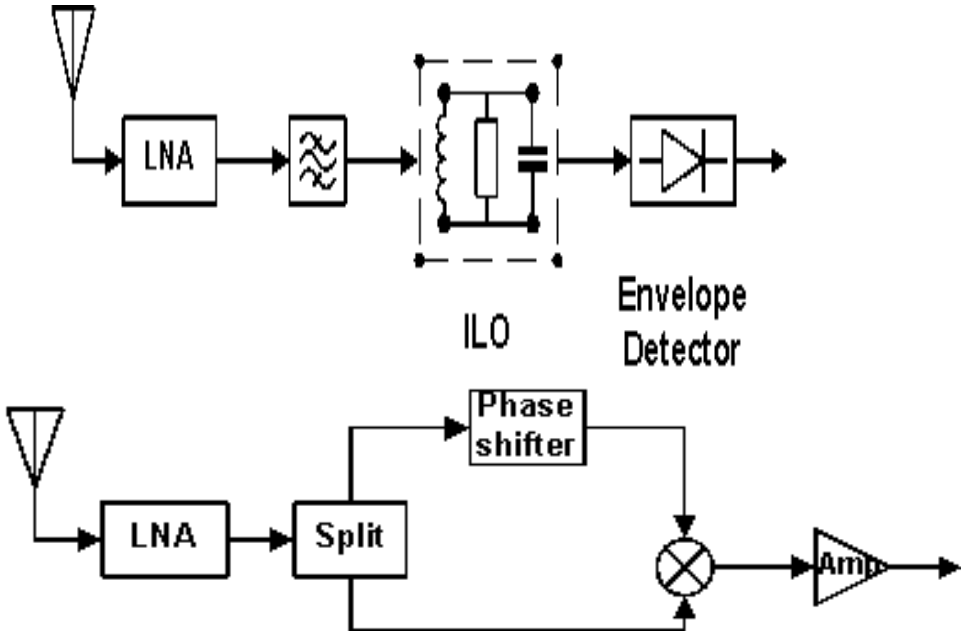
Höchstfrequenz elektronik

RWTH AACHEN UNIVERSITY

Exploration and modelling of Receiver Base Continuous Phase-FSK

Background

CPFSK is chosen because of its attractive function for modulation in modern short-range wireless systems. Its implementation complexity is low, resulting in low-power consumption and its availability to the implementation up to THz-frequencies.



Tasks

Phase 1: Research Literature

- Make a survey on CPFSK demodulation.
- Understanding of the whole receiver parameters.

Phase 2: Modeling and simulation

- Study of Verilog/Verilog AMS
- receiver modeling and simulation at 60 GHz.

Phase 3: Evaluation

- Evaluation of the receiver performance (data rate, bandwidth efficiency)
- Energy evaluation of system.
- Thesis and publication.

Contact

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