

Master Thesis



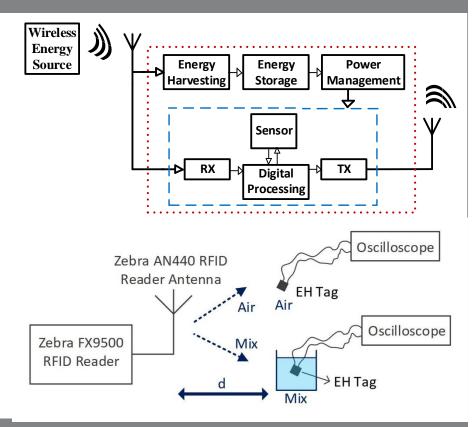
Wireless Energy Harvesting Systems in mmw Frequencies

The advances in Internet of Things (IoT) enabled more and more devices to be connected to the clouds for effective remote control over multiple devices. Expansion in the application areas of IoT also raises the question of sustainability of massive sensor usage and their power management in terms of economic and environmental aspects. Radio frequency (RF)-powered devices attract great attention for the development of wireless sensor networks since they do not need any battery replacement or maintenance over the long run.

The aim of this thesis work is to explore RF energy harvesting in millimeter wave (mmw) frequencies. A theoretical analysis of such systems, together with the simulations and design is expected. A deep-scale, advanced CMOS technology will be used.

Requirements:

- Understanding of RF theory
- Basic knowledge of CAD tools, e.g. Cadence Virtuoso



Ansprechpartner

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