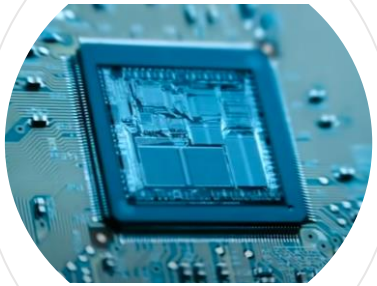
Internship Positions for Master Thesis Students and Possible Ph.D. Positions

Fully Integrated Power Management

- Low power bandgap voltage reference in nm-scale CMOS
- Fully integrated capless LDO with fast load response for wireless transmitter application in nm-scale CMOS
- A fully integrated Switched Capacitor Converter (SCC) with low power consumption regulation loop for high efficiency in light load condition in nm-scale CMOS
- Low power control loop for Hybrid DC-DC converter in nm-scale CMOS
- And much more to come...

Digital Assisted RF and mmW

- High performance harmonic oscillators for car radar applications) in nm-scale CMOS
- Low power transceiver for Bluetooth Low Energy radios in nm-scale CMOS
- Digital power amplifiers for Ultra Wide Band ranging applications in nm-scale CMOS
- mmWave Front-ends for wireless communications systems and radar applications in CMOS/BiCMOS technology.
- And much more to come...



Clocking and Interfaces

- Design of low power digitally controlled ring oscillator in nm-scale CMOS
- Analysis and develpment of a compact delay lines for digital DLL in nm-scale CMOS
- Concept and design of self-calibrated reference frequency doubler in nm-scale CMOS
- Design of a digital PLL with a dedicated modelling and design tool CAD in nm-scale CMOS
- And much more to come...

Analog to Digital Converters

- Modelling and simulation of cascade oversampling ADC (e.g. SMASH Delta Sigma) in nm-scale CMOS
- Modelling and simulation of RFDAC for Bluetooth/Wifi radios in nm-scale CMOS
- Concept study on the Continuos Time Pipeline ADC architecture for high speed applications
- Coding scripts for Systematic Design of Multi-Stage Operational Amplifiers
- And much more to come...

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