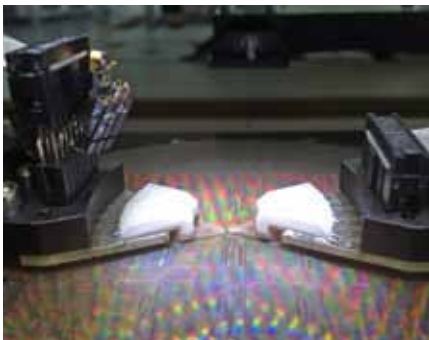


Overview

The University of Innsbruck is a public university. It was founded in 1669 and is the biggest and most important research and education institution in western Austria and comprises today more than 28.000 students and more than 4.500 staff and faculty members. Located in the heart of the Alps, the University of Innsbruck offers the best conditions for successful research and teaching, and international rankings confirm the University's leading role in basic research.



The group of Microelectronics and Implantable Systems (MEIS) enjoys a strong national and international reputation for its competences in analog and application specific integrated circuit design. Project partners benefit not only from the group's extensive expertise in semiconductor engineering, circuit topologies and architectures but also from its comprehensive laboratory and measurement equipment.



ASIC-Design

When it comes down to the design and development of circuit components, capacitive and inductive DC/DC converters, gate drives and temperature sensors are listed among the key competences in MEIS's portfolio. Furthermore, semiconductor development is possible in either Si CMOS / LDMOS, SiGe or GaAs technology applying node sizes ranging from 350 to 55 nm. Circuit design capabilities include simulation over process, voltage and temperature corners as well as yield estimation based on monte carlo evaluations.

Anechoic Chamber

Further, radiated emissions are investigated in an anechoic chamber enabling non-reflective, high precision measurements. Hereby, self-interference due to internal

backscatter of electromagnetic waves is excluded by an absorptive chamber interior. Likewise, external noise sources are shielded away from the devices under test.

On-Wafer measurements

Additionally, a semiautomatic wafer-prober executes on-wafer tests on scales from single dice up to 300 mm wafer sizes. At the same time, the temperature behavior up to 200 °C can be determined if so desired.

In general, the scope of engineering and measurement possibilities allows for high-precision design, verification and validation of appliances and thus also for yield optimization of integrated circuits. Everything combined makes MEIS a high achiever and an excellent choice for research and development.