IHP GmbH - Leibniz-Institut für innovative Mikroelektronik

Das IHP ist ein Institut der Leibniz-Gemeinschaft und betreibt Forschung und Entwicklung zu siliziumbasierten Systemen, Höchstfrequenz-Schaltungen und -Technologien einschließlich neuer Materialien. Es erarbeitet innovative Lösungen für Anwendungsbereiche wie die drahtlose und Breitbandkommunikation, Sicherheit, Medizintechnik, Industrie 4.0, Mobilität und Raumfahrt. Das IHP beschäftigt ca. 330 Mitarbeiterinnen und Mitarbeiter. Es verfügt über eine Pilotlinie für technologische Entwicklungen und die Präparation von Hochgeschwindigkeits-Schaltkreisen mit 0,13/0,25 µm-BiCMOS-Technologien, die sich in einem 1000 m² großen Reinraum der Klasse 1 befindet.

Bachelor thesis and student assistant (m/f/d): Electrical characterization and evaluation of individual SRAM cells

Job-ID: 7035/25 | Department: System Architecture | Working Time: 19h/week | Limitation: 3-6 months | Entry Date: as soon as possible |Salary (only if student job): as per Guideline of the State of Brandenburg on the Working Conditions of Scientific and Student Assistants

City: Frankfurt (Oder); Starting date (earliest): At the earliest possible; Duration: 3-6 months; Remuneration: as per Guideline of the State of Brandenburg on the Working Conditions of Scientific and Student Assistants

Working field

The position:
Within the scope of this bachelor thesis, the electrical characterization of individual SRAM cells is to be carried out with the aid of needle probes. The aim is to develop measurement routines, record measurement data and then systematically evaluate it.

Tasks:

- Familiarization with the functionality of SRAM cells and their electrical characterization
- Carrying out measurements on individual SRAM cells with needle probes
- Development and implementation of measurement routines for automated characterization
- Data evaluation and interpretation of the measurement results
- Documentation of the results

Requirements

- Degree in electrical engineering, physics, microsystems engineering or a related

field of study
- Basic knowledge of semiconductor devices, ideally in memory technologies
- Interest in experimental work and data analysis
- Programming skills (e.g. Python, MATLAB) are an advantage
- Careful and independent way of working

What we offer

The bachelor thesis can be combined with employment as a student assistant to further deepen practical experience in measurement technology and data analysis.

Our Offer:
Conducting research in a challenging, multinational environment giving you excellent career opportunities. You will have the chance to establish international reputation at the edge of top-notch technologies.
IHP is TOTAL E-QUALITY-certified for equal opportunities for women and men at work and actively pursues the equality of all gender and all groups of people. We promote the professional development of women and strongly encourage them to apply. Disabled applicants, qualified according to the above criteria, will be given preference over other candidates with equivalent relevant qualifications.
If you are looking for accommodation in Frankfurt (Oder), our Relocation Service will be happy to assist you.

Application

Contact person: Norbert Herfurth

By internet: https://www.ihp-microelectronics.com/career/vacancies/online-application-form?job=7035/25#c977

More information at https://stellenticket.de/194539/TUB/
Offer visible until 13/06/25