



The KAI center of competence for automotive and industrial electronics is located at the TPV – Technology Park Villach in Carinthia, Austria. We focus on industrial research and development for Austrian High-Tech Enterprises in close cooperation with Austrian and international Universities and research facilities.

Together with our partner Infineon Technologies Austria AG we offer an industry-funded student (m/f) position for a

Master thesis: "Concept study on integrated gate drivers for smart DMOS power switches"

After receiving basic training on the matters of smart power IC design, you take part in a research project for the development of advanced analog / digital control and protection concepts for the next generation of smart power devices. Your tasks will be the specification of gate driver requirements, the collection of circuit concepts and their verification by SPICE simulation, as well as the design and setup of a hardware demonstrator to deliver a basic proof of concept.

Requirements

- University or «Fachhochschule» curriculum in electronic engineering, preferably with a focus on control theory or power electronics
- Master / diploma thesis should be finished and degree obtained until summer of 2009.
- Basic knowledge of SPICE circuit simulation (preferably in the Cadence / Spectre environment)
- Practical electronic lab experience (measurements, manual skills with electronic equipment, PCB soldering...)
- Fluent usage of MS Excel and Word (data analysis and visualization, documentation)
- Solid knowledge of mathematics, especially control theory
- Basic knowledge of semiconductor devices, especially physical MOS models
- Fluency in spoken and written technical English and German

You will receive a temporary work contract with KAI GmbH for the duration of your thesis. We prefer to offer a full time position (38.5 hrs/week), but a part time solution (25...30 hrs) can also be handled if required by your university timetable.

Contact

Please direct your written application and CV before end of **October 2008** to:

Dr. Michael Glavanovics
Tel: +43 664 820 3553
michael.glavanovics@k-ai.at

KAI GmbH – Kompetenzzentrum
Automobil- und Industrieelektronik
Europastrasse 8, 9524 Villach, Austria