



The design center DMOS GmbH in Dresden develops customer specific mixed signal integrated circuits for smart power applications, mainly used in the automotive industry. Our ASICs and ASSPs are also used in smart home appliances or the “industry 4.0”. The company owns a building, with excellent work and development conditions close to Dresden Main Station.

The DMOS GmbH is a subsidiary of the Elmos Semiconductor SE.

Internship at the DMOS GmbH

Analog Design: Technology Transfer and Circuit Optimization of Analog Blocks for Motor Control ICs

In the semiconductor industry, transferring existing IC products to modern technologies is a standard process. For our motor control ICs, a new HV 130 nm CMOS technology offers outstanding properties in terms of robustness and performance.

The objective of this work is the complete technology transfer and circuit optimization of an analog circuit block.

During this internship the following tasks are to be solved:

- Potential Circuit Blocks to be Ported:
 - Chopper amplifier for a Hall sensor
 - Sigma-delta ADC
 - Phase current sense amplifier
- **System Analysis:** Familiarization with the structure and specification of the selected circuit block
- **Tool Onboarding:** Familiarization with the modern circuit design and verification environment
- **Technology Analysis:** Familiarization with the properties of the HV 130 nm CMOS technology
- **Porting:** Circuit implementation, simulation, and optimization
- **Finalization:** Documentation and presentation of the results

Our requirements:

- Completed undergraduate studies or a bachelor's degree in electrical engineering or a comparable field
- Specialization during undergraduate studies in microelectronics, information technology, power electronics, or a comparable field

This is what you will benefit of:

- equitably remuneration
- Interesting and challenging tasks in an international environment
- Competent co-workers
- Flexible working hours, company events and social offers

dmos²
member of the elmos group

Interested? Apply for it!

Send us your application as PDF file by mail.

We are looking forward to get to know you in person!

Contact:

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