



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". DMOS GmbH 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

*Development of a gate driver for a GaN based inverter*

Modern power electronic systems driving motors or DC/DC converters can benefit by using GaN devices instead of classical MOSFET devices. In any case, knowing about differences and parallels between these two technologies can be beneficial for designing new better performing circuits. However, new driver circuits are required to utilize these new transistor technology. We at DMOS develop such driver ICs for international customers in the automotive and industrial sector.

Create your own driver concept and derive a specification. Incorporate the knowledge you have gained into your own integrated circuit design. Verify your design and assumptions with modern simulation tools. During your internship you will start preparing an overview between the novel GaN and Si based technologies.

#### During this internship the following tasks are to be solved:

- Prepare one or more block diagrams containing necessary functions
- Prepare a specification
- Design of a low side driver and do simulations
- Design of a high side driver and do simulations
- Prepare top level design and verify against specification
- Documentation, presentation

#### Our requirements:

- Completed basic studies in electrical engineering or comparable
- Knowledge in the development of integrated circuits
- Knowledge of development environments for analog circuits

#### This is what you will benefit of:

- equitably remuneration
- Interesting and challenging tasks in an international environment
- Comprehensive introductory and training programs
- Competent co-workers
- Flexible working hours, possibility of mobile office, company events and social offers

**dmos<sup>+</sup>**  
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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