



## Staff Engineer Virtual Prototyping for Discrete Power Semiconductor Components (f/m/div)\*

### Job description

Are you passionate about power semiconductors? Do you want to develop methods, that describe the properties, robustness and efficiency of our products in even further detail and to actively contribute to their improvement? As Staff Engineer Virtual Prototyping for Discrete Power Semiconductor Components you are able to take our models to the next level! You will develop new methods within virtual prototyping, share your insights and bring relevant stakeholders on board in order to jointly bring a state-of-the-art product to the market. With this position you will be entering our „technical ladder”: our career path for experts. You will be able to focus deeply on technology – while further pursuing your career. As you continually expand your expert knowledge, puzzle over matters and solve problems, you will position yourself as a thought leader – thus helping our products improve our world a bit more each day.

In your new role you will:

- Take over responsibility for **virtual prototyping projects for discrete power semiconductors**
- Develop **measurement methodologies and methods for Power Devices** in close cooperation with the verification lab
- Develop and maintain new **SPICE models and perform the calibration** to characterization data
- **Integrate** and verify state of the art **Spice simulator tools** in our environment **for model development**
- Evaluate the **thermal and electrical characteristics** of new packages, components and boards using **finite element analysis**
- Simulate **application based systems** to verify and improve **performance and efficiency** of our power MOSFETs
- Elaborate and implement **processes, workflows and standards** within **virtual prototyping**
- Collaborate in automation projects for **increasing efficiency of simulation and measurement setups and methodologies**
- Support the **standardization of compact models** including tool landscape

### Profile

You understand how to create value with ideas and solutions, are open-minded to new ideas and demonstrate openness towards different ways of thinking and acting. Thanks to your excellent communication skills, you are able to quickly establish a trustworthy and constructive cooperation.

### At a glance

Location: **Munich (Germany)**  
Job ID: **333497**  
Start date: **as soon as possible**  
Entry level: **3-5 years**  
Type: **Full time**  
Contract: **Permanent**

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### Contact

**Nadine Patriarca Roth**  
Talent Attraction Manager



You are best equipped for this task if you have:

- A **degree in electrical engineering, physics, mathematics** or a related field
- **3-5 years of professional experience** in **semiconductor physics** and **power electronics**
- Very good knowledge in the field of **compact modeling and simulation**
- Very good knowledge in **SPICE simulation software** (e.g. with SIMetrix, LT-Spice and OrCAD)
- Very good analytical skills using **mathematical approaches**
- Good knowledge in **3D EM analysis** (HFSS) and **thermodynamic simulation** (ANSYS)
- Experienced in **application based simulation** of switched mode power supplies (**SMPS**)
- Proficient **Python skills**
- **Strong networking skills** that help you to build sustainable connections across locations & subjects
- Fluent in English and German

## Benefits

- **Munich:** Coaching, mentoring networking possibilities; Wide range of training offers & planning of career development; International assignments; Different career paths: Project Management, Technical Ladder, Management & Individual Contributor; Flexible working conditions; Home office options; Part-time work possible (also during parental leave); Sabbatical; On-site creche and kindergarden with 120 spots, open until 6pm; Holiday child care; On-site social counselling and works doctor; Health promotion programs; On-site gym, jogging paths, beachvolleyball, tennis & soccer court; On-site canteen; Private insurance offers; Wage payment in case of sick leave; Corporate pension benefits; Flexible transition into retirement ; Performance bonus; Reduced price for public transport and very own S-Bahn station; Access for wheelchairs

## Why Us

**Part of your life. Part of tomorrow.**

We make life easier, safer and greener – with technology that achieves more, consumes less and is accessible to everyone. Microelectronics from Infineon is the key to a better future. Efficient use of energy, environmentally-friendly mobility and security in a connected world – we solve some of the most critical challenges that our society faces while taking a conscientious approach to the use of natural resources.

– **Power & Sensor Systems (PSS) drives leading-edge power management, sensing and data transfer capabilities** –

Infineon **PSS** semiconductors play a vital role in enabling intelligent power management, smart sensitivity as well as fast and reliable data processing in an increasingly digitalized world. Our leading-edge power devices make chargers, adapters, power tools and lighting systems smarter, smaller, lighter and more energy-efficient. Our trusted sensors increase the context sensitivity of “things” and systems such as HMI, and our RF chips power fast and reliable data communication.

[Click here](#) for more information about working at PSS with interesting employee and management insights and an overview with more #PSSDreamJobs.

*\* The term gender in the sense of the General Equal Treatment Act (GETA) or other*



*national legislation refers to the biological assignment to a gender group. At Infineon we are proud to embrace (gender) diversity, including female, male and diverse.*

