

# Driving decarbonization and digitalization. Together.



## Master Thesis: Precision Current Monitoring for integrated DCDC drivers circuit (f/m/div)

### Job description

Do you want to deepen your knowledge by getting some work experience and as cherry on top doing your Master Thesis with a future-oriented company on a real-life topic? If you are currently studying in the field of engineering or similar then do not hesitate to apply now and join our team in Graz!

You will be responsible for investigating and implementing a **monitoring circuitry** to measure the output current of the half-bridge and create an **integrated circuit design** to ensure that the **SMPS** are operating efficiently at increased switching frequencies.

Your responsibilities will include the following:

- Learning the basics of the **Buck converter** and the current **monitoring circuitry**
- Studying different concepts of current monitoring and analyzing their pros and cons
- Developing an **integrated circuit design** to monitor the coil current for the next generation of bridge drivers

**This thesis has to be written in cooperation with an university.**

### Further Information

Type of employment: Temporary / Full-time or Part-time (flexible working hours from Monday to Friday between 6 a.m. and 7 p.m.)

Duration: min. 6 months

### Profile

You successfully meet the requirements, if you are a motivated and committed **engineering student** or in a related field. You are best equipped for this task if you additionally offer:

- A basic understanding of **SMPS** and have knowledge of **programming**
- A strong interest in integrated **circuit design** and **layout**
- Prior experience with the **Cadence design framework**
- Excellent **analytical thinking** skills
- Communication skills in both **English** and/or **German**

This position is subject to the collective agreement for workers and employees in the electrical and electronics industry (full-time), employment group D for master

### At a glance

Location:

Job ID: **HRC0622823**

Start date: **as soon as possible**

Entry level: **0-1 year**

Type: **Full time / Part time**

Contract: **Temporary**

Apply to this position online by following the URL and entering the Job ID in our job search. Alternatively, you can also scan the QR code with your smartphone:

Job ID: **HRC0622823**  
[www.infineon.com/jobs](http://www.infineon.com/jobs)



### Contact

**Lisa Derhaschnig**

Recruiter



students (<https://www.feei.at/wp-content/uploads/2023/05/minimum-salaries-white-collar-workers-2024.pdf>).

**Please attach the following documents (German or English) to your application:**

- Motivation letter
- CV
- Certificate of matriculation at a university
- Latest Transcript of records (not older than 6 months)
- Highest completed educational certificate (Bachelor certificate for Master students)
- Reference letter (optional)

## Benefits

- **Graz:** 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 social counselling and works doctor; Health promotion programs; Discounted lunch possibilities; Private insurance offers; Corporate pension benefits; Flexible transition into retirement; Performance bonus; Accessibility, access for wheelchairs

## Why Us

**Driving decarbonization and digitalization. Together.**

Infineon designs, develops, manufactures, and markets a broad range of semiconductors and semiconductor-based solutions, focusing on key markets in the automotive, industrial, and consumer sectors. Its products range from standard components to special components for digital, analog, and mixed-signal applications to customer-specific solutions together with the appropriate software.

The central R&D organization „**Design Enabling and Services**“ (DES) provides the design environments (design-systems) to the different product development teams at Infineon. With leading edge design methods, complex building blocks and a wide range of product development services DES enables Infineon's advanced IC development. This means the complete value creation chain from abstract system models down to the fully verified product layout which ensures high quality manufacturing readiness.

**We are on a journey to create the best Infineon for everyone.**

This means we embrace diversity and inclusion and welcome everyone for who they are. At Infineon, we offer a working environment characterized by trust, openness, respect and tolerance and are committed to give all applicants and employees equal opportunities. We base our recruiting decisions on the applicant´s experience and skills.

We look forward to receiving your resume, even if you do not entirely meet all the requirements of the job posting.

Please let your recruiter know if they need to pay special attention to something in order to enable your participation in the interview process.

[Click here](#) for more information about Diversity & Inclusion at Infineon.

**Infineon Hub - Connect. Create. Challenge.**

The iHub at TU Wien represents an inspiring tech platform, networking area and event location, connecting Infineon Austria with tech experts, science specialists and young professionals.

Check out our upcoming events:

[Infineon iHub](#)

