

Digital Power Systems



Bachelor/Masterthesis GaN 60W Smart-Power Supply

Your Thesis at DPS:

You develop, test and verify the SP60: A smart 60W GaN power supply with digital control and monitoring capabilities via Modbus and USB. The primary goal of this project is to create the software architecture for the SP60 and to provide digital control of the SLC converter. The power supply PCB features two RISC-V microcontrollers: one controls the switching of the power semiconductors in the flyback converter, and the other acts as a supervisor, communicator.

Your profile:

- You have solid power electronics knowledge.
- You have proven Embedded-C Programming experience.
- You have a strong focus on quality and love to find creative solutions.

<u>Our offer:</u>

- You will work on real industry projects.
- You will learn a lot, both practically and theoretically.
- We are a small team. You will receive friendly and personal support. Short communication channels and good supervision are guaranteed.
- Salary (500 Euro)
- Independent work with plenty of creative freedom for your own innovative ideas.

<u>About us:</u>

Digital Power Systems is a spin-off from KIT and develops digital, durable power electronics for a wide range of long-lasting, sustainable applications. We are an academically-oriented company, aiming to develop the best possible solution. We take pride in our well-equipped labs, located near the university. With us, you will get to know and productively apply the latest tools and technologies. We will both challenge and support you. Right from the start, you will be given responsibility, but experienced developers will always be there to assist you with any questions.

If we've piqued your interest, apply to Michael with your resume, cover letter, references, and transcript. Be sure to let us know what tasks you particularly enjoy!

Short Info

<u>Field:</u>

Electrical Engineering

Einstieg:

Now

Applications:

Apply to:

Dr. Michael Heidinger michael.heidinger@ digitalpowersystems.eu



Rethinking Power Supplies