Digital Design Engineer Quantum Computing (f/m/div)*

Job description

Join us to make large-scale quantum computing a reality! We are looking for a digital design expert to take ownership of the development of (cryogenic) digital control electronics in trapped ion quantum processors. These processors require digital control, which enables ion motion, quantum gates, and quantum state detection. You will develop this integral part of our trapped ion quantum processors. Take this opportunity and be part of our growing quantum computing team.

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 ownership for **chip level digital design activities** and work within a **highly innovative team of experts** to shape a **system solution**
- **Contribute to digital concepts** for optimal control of the quantum computer
- Perform **RTL and gate-level design**, **logic synthesis**, **timing and power analysis** and optimize for lowest power consumption
- Guide and support **pre-silicon verification** utilizing various methodologies such as constrained random verification
- Support **bring-up and validation of designs on silicon** with cross-functional team members
- Generate **design documentation**
- Supervise and support **PhD- and Master students**

Profile

You describe yourself as a highly enthusiastic team player who thinks and acts cooperatively, being able to quickly establish successful collaborations. You are receptive to other ways of thinking and have the passion to develop new ideas and to solve complex problems. With your structured working style, you are able to demonstrate high qualitystandards for yourself and other people.

You are best equipped for this role if you:

- Bring a degree in **Electrical Engineering**, **Microelectronics** or a similar field

At a glance

Location:	**Munich (Germany)**
Job ID:	**342563**
Start date:	**as soon as possible**
Entry level:	**3-5 years**
Type:	**Full time**
Contract:	**Permanent**

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Job ID: **342563**

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Contact

Christian Miller
Talent Attraction Manager

- Gathered at least **3-5 years of experience** in **digital design** implemented on **sub-micron technologies**
- Have experience with common **digital design** and **verification tools** (Synopsis, Cadence etc.)
- Have a profound knowledge of **hardware description languages** (SystemVerilog and VHDL)
- Are a **team player** who wants to make **quantum computing a reality** together with an **interdisciplinary team** of engineers and physicists
- Have fluent English skills, German is a plus

Prior experience in the field of **cryogenic circuit design** or **quantum computing** is not mandatory but definitely a plus.

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.