



## Master Thesis: Integrated Photonics for Trapped-Ion Quantum Processors (f/m/div)\*

### Job description

Our PSS division is looking for support in form of a master's thesis on the topic of "Integrated Photonics". If you are a master's student from the field of Physics, Quantum Engineering, Photonics or similar then you should apply at our young team of quantum computing enthusiasts and help making quantum computing a reality.

In your new role you will:

- Development of **on-chip photonics** for **trapped-ion quantum processors**
- Simulation of **waveguides** based on **patterned dielectrics**, like SiN or AlO
- Fabrication of **photonic test structures**

#### Further Information

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

Duration: 12 months

This thesis has to be written in cooperation with your host university.

### Profile

You successfully meet the requirements if you are a motivated and committed **master student** from the field of **Physics, Quantum Engineering, Photonics** or similar. You are best equipped for this task if you additionally offer:

- Strong motivation to make **quantum computing a reality**
- Ability to work **independently**
- A **structured** and **precise working style**
- **Teamplying** skills
- Good **English** language skills, German as an additional plus

This position is subject to the collective agreement for workers and employees in the electrical and electronics industry (full-time), employment group B for bachelor students, employment group D for master students (<https://www.feei.at/wp-content/uploads/2022/05/minimum-salaries-white-collar-workers-2022.pdf>).

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

- Motivation letter
- CV

### At a glance

Location:	<b>Villach (Austria)</b>
Job ID:	<b>HRC0167870</b>
Start date:	<b>Apr 01, 2023</b>
Entry level:	<b>0-1 year</b>
Type:	<b>Full time</b>
Contract:	<b>Temporary</b>

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: **HRC0167870**  
[www.infineon.com/jobs](http://www.infineon.com/jobs)



### Contact

**Lisa Derhaschnig**  
Student Attraction Manager



- Certificate of matriculation at a university (you must be enrolled and not on academic leave)
- Latest Transcript of records (not older than 6 months)
- Highest completed educational certificate (Matura certificate for Bachelor students, Bachelor certificate for Master students)
- Reference letter (optional)

## Benefits

- **Villach:** 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; Child care in Villach & Klagenfurt; On-site social counselling and works doctor; Health promotion programs; On-site canteen; Private insurance offers; Wage payment in case of sick leave; Corporate pension benefits; Flexible transition into retirement; Performance bonus; Accessibility, access for wheelchairs

## Why Us

### Part of your life. Part of tomorrow.

Infineon is a world leader in semiconductor solutions that make life easier, safer, and greener. Our solutions for efficient energy management, smart mobility, and secure, seamless communications link the real and the digital world.

### – 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.

*\* 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.*

### Infineon Hub - Connect. Create. Challenge.

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Check out our upcoming events:

[Infineon iHub](#)

