



## Bachelor Thesis Topic: Design of an Automated Functional Test

### Job description

At KAI GmbH, you will perform your thesis project in an industrial research environment, guided and supported by experienced researchers in such diverse areas as hard- and software design, simulation, modeling and semiconductor technology. We work in close cooperation with universities and research facilities supporting your academic education, whereas our industrial partner Infineon offers interesting opportunities for a prospective career path in the semiconductor industry.

During your thesis project, we expect you to become a growing expert for quality testing of electronic hardware, in the field of power semiconductor devices. This means you will need to acquire some special knowledge and perform dedicated tasks:

- Improve your skills in electronic hardware, be able to **read and understand** a given **electronic schematic** and layout
- **Develop a test circuit concept** for an available power cycling stress test board together with your supervisor
- **Build up a test bench** based on the developed test concept
- **Program, debug and finalize** the **automated test** in the script language Lua within an available software framework
- **Document** your results by writing and submitting your Bachelor thesis

During this thesis work, you will learn about the structure and design of semiconductor reliability stress test systems and execution of life tests.

#### Further Information

Start: October 2021

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

Duration: min. 6 months

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

### Profile

You are an **electronic engineering student** and have a basic understanding the following skills:

- Be able to read and understand a given electronic schematic and layout
- Have programming skills; favorable in **Lua** or **C/C++**

### At a glance

Location: **Villach (Austria)**  
Job ID: **320100**  
Start date: **Oct 01, 2021**  
Entry level: **0-1 year**  
Type: **Full time**  
Contract: **Temporary**

Apply to this position online by following the URL and entering the Job ID in our job search:

Job ID: **320100**  
[www.infineon.com/jobs](http://www.infineon.com/jobs)

### Contact

Nico Steinhauser



- Be able to work and communicate well with our international team in **English and/or German (B1)**

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 (<https://www.feei.at/leistungen/informations-service/mindestlohne-und-gehalter-2020>).

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

- Motivation letter
- CV
- Certificate of matriculation at a university
- Transcript of records
- Highest completed educational certificate (Matura certificate for Bachelor students, Bachelor certificate for Master students)
- Reference letter

