TU Graz

Open Thesis / Project:

HADES-TEST: A Test System for the Microcontroller Design, Lab

Motivation & Summary

The HADES-V is a RISC-V-based microcontroller for students to implement in the Microcontroller Design, Laboratory. To evaluate student submissions automatically, we want to adopt our ATTEST student evaluation system (already in use in the Real-Time Operating System course) to this new use case. ATTEST is an open-source and remote hardware-in-the-loop testing solution with pre-defined test cases for embedded software particularly designed for teaching in university courses.

Recommended Prior Knowledge

- Python
- C/C++
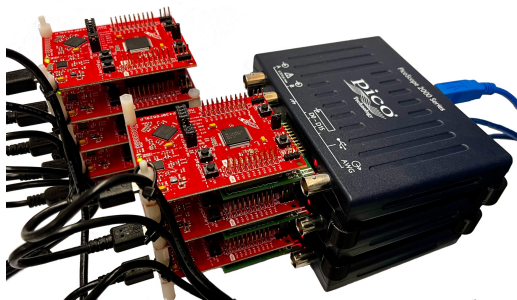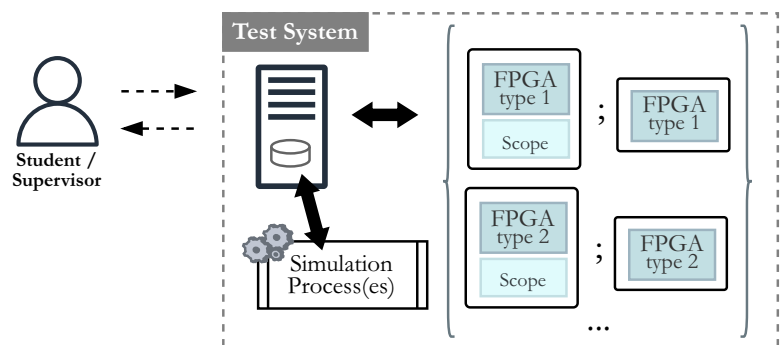- SystemVerilog
- Toolchains (make, etc.)

Thesis Type

- Bachelor's Thesis
- Master's Project

Student Target Groups

- Computer Science (CS)
- Information and Computer Engineering (ICE)
- Electrical Engineering (EE)
- Space Sciences and Earth from Space (SSES)

Goals & Tasks

- Adapt ATTEST for the new HADES-V in the Microcontroller Design, Laboratory
- Build test setup in real hardware
- Evaluate your setup

Contact & Information

Meinhard Kissich (meinhard.kissich@tugraz.at)
Tobias Scheipel (tobias.scheipel@tugraz.at)

Institute of Technical Informatics
Embedded Architectures & Systems Group