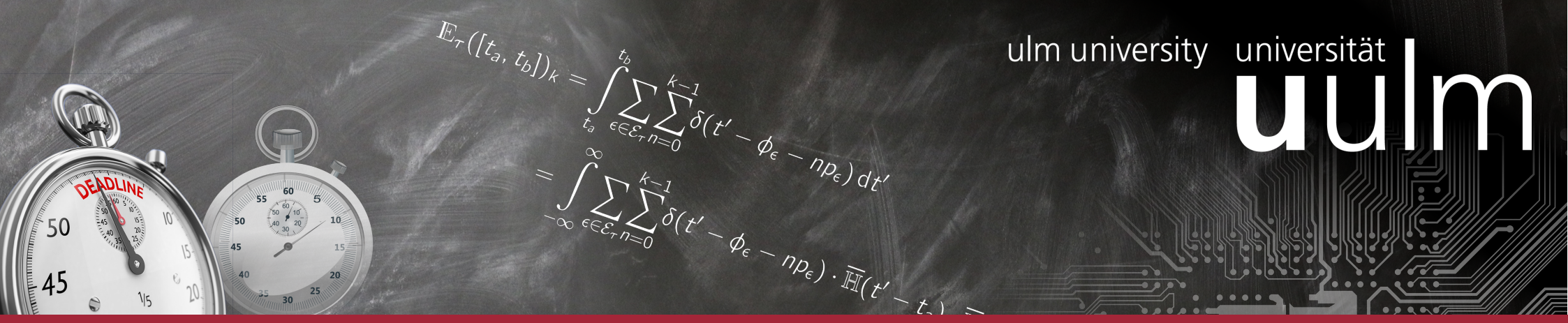
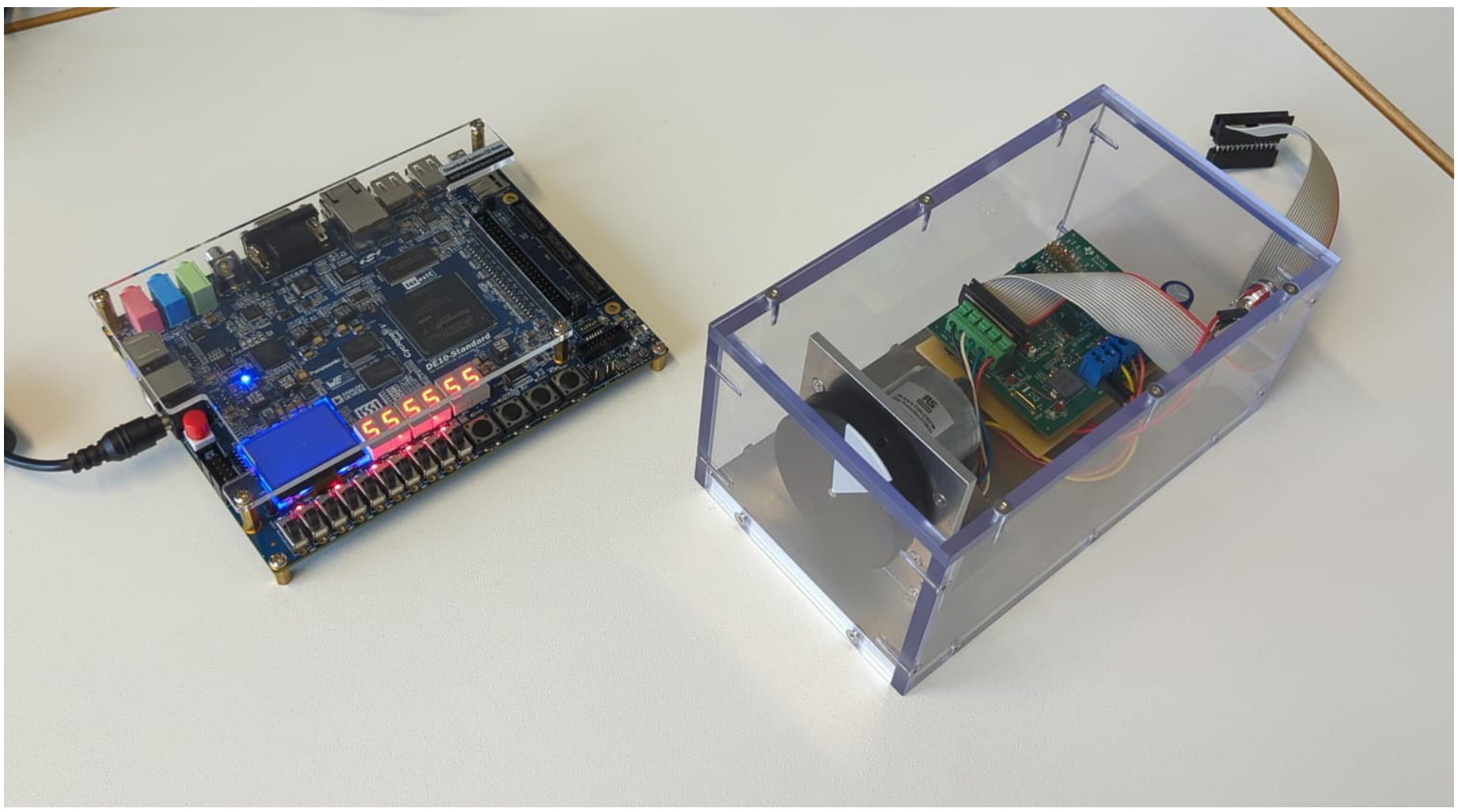


Laboratory

Laboratory Embedded Systems

Join the practical laboratory exercises (CS5850.039) and bring embedded systems to life: you'll design hardware and software for real-time systems, build and program soft-core processors using the NIOS architecture, and assemble complete System-on-a-Programmable-Chip (SOPC) solutions. Hands-on debugging of mixed hardware/software systems will sharpen your problem-solving skills, and the highlight is an exciting application project: implementing digital control of a BLDC motor on an FPGA. You'll get to configure FPGA logic, implement motor-control algorithms in hardware and software, interface sensors and drivers, and observe how low-level timing on the FPGA dramatically alters performance — all in a supportive lab environment that lets you prototype, test, and iterate on your own designs.



The laboratory is best suited for students who want tangible, high-impact experience with cutting-edge embedded hardware and motor control and have knowledge in architecture of embedded systems and experience with VHDL.

Contact

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ertis embedded real-time systems
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