

Open Thesis / Project:

MCSmartOS goes AURIX

Motivation & Summary

The AURIX™ MCU family is developed for automotive applications. An AURIX™ MCU consists of multiple TC cores, which are multi-purpose cores, combining functionality of RISC, MCU, and DSP processors.

To enhance functionality of MCSmartOS and broaden its application scope, this work aims to port the operating system to run on the TC cores of a AURIX™ development board.

As MCSmartOS' kernel is designed to be easily portable, all on-chip peripherals of the SoC must be supported as well.

Recommended Prior Knowledge

- C/C++
- Real-time operating systems

Thesis Type

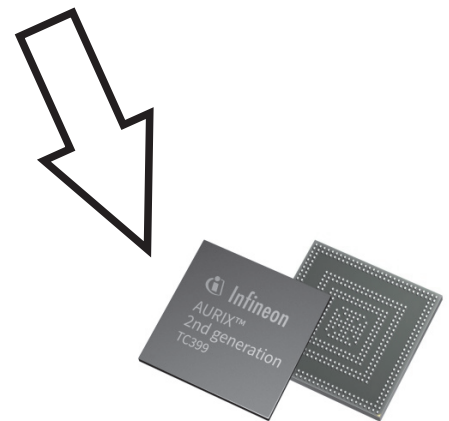
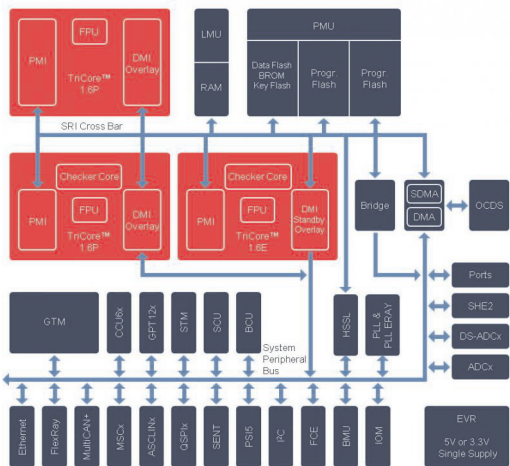
- Master's Project
- Master's Thesis

Student Target Groups

- Information and Computer Engineering (ICE)
- Computer Science (CS)

Goals and Tasks

- Setup of AURIX™ toolchain
- Porting of MCSmartOS to AURIX™
- Creation of test application



Sources:
<https://www.infineon.com/>

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<http://www.tugraz.at/en/institutes/iti/teaching/open-theses/>



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