

Development of Device Driver Software for wireless transceivers

Background

The Chair of Integrated Analog Circuits and RF Systems develops low power, standard independent wireless transceivers as application specific integrated circuits for the Internet of Things, Industry 4.0, Cyberphysical Systems, ... The connection between the wireless transceiver and the host platform is done through SPI.

Task

The wireless transceiver is controlled by its SPI master, which in our case is an ARM Cortex M4 microcontroller. For configuration and for transferring payload data, a device driver is to be developed. This driver needs to interface with existing microcontroller code. Reference can be the existing driver for the TDA5340 transceiver.

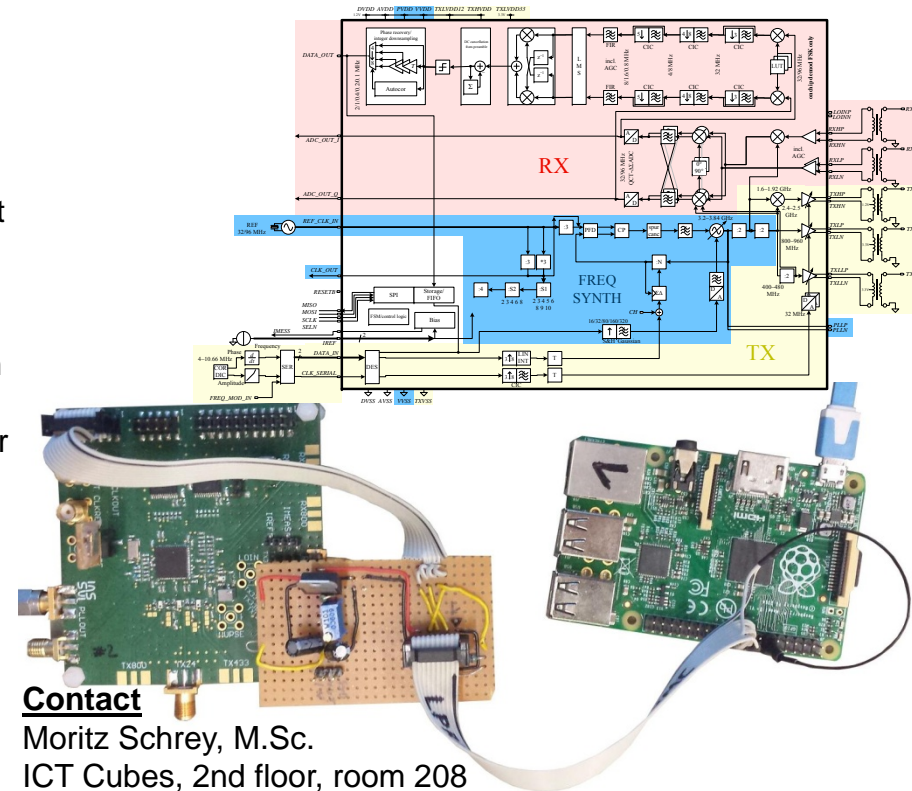
Additional/alternative work could be inclusion of the RIOT operating system.

Accordingly, experience with C programming and basic knowledge about how wireless links work (channel model, channel coding) are beneficial.

We offer a comfortable, open and friendly working atmosphere, social interaction and professional support.

December 2016

Bachelor/Master Thesis



Contact

Moritz Schrey, M.Sc.
 ICT Cubes, 2nd floor, room 208
 0241 80-20154
[mschrey@ias.rwth-aachen.de](mailto:mSCHREY@ias.rwth-aachen.de)