

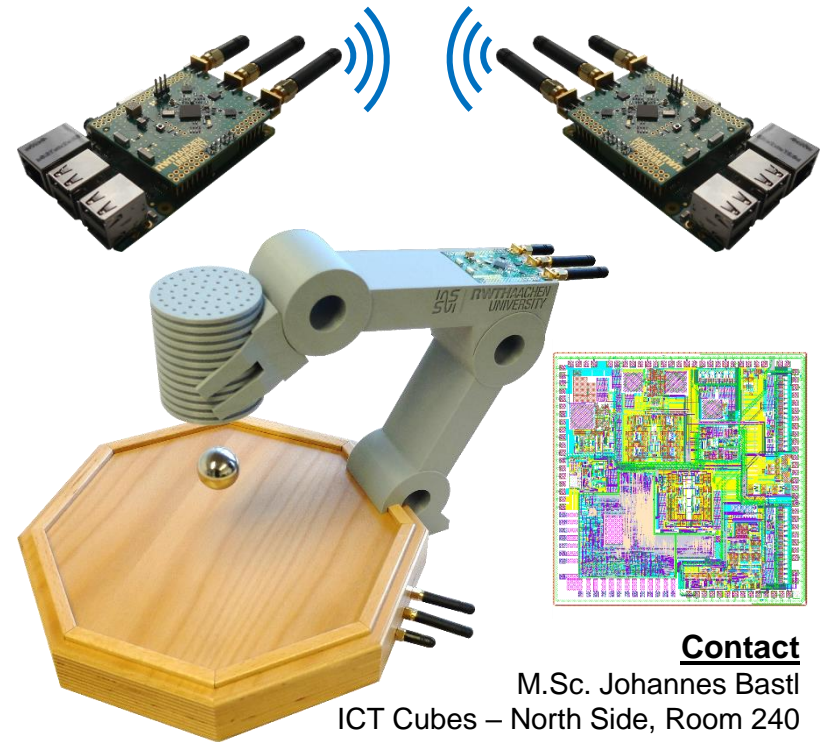
Driver and application development for a multi-standard wireless transceiver

Background

The CyberRF chip represents the latest generation of energy efficient wireless transceivers developed at the Chair of Integrated Analog Circuits with regard to IoT and Industry 4.0. For providing compatibility to the variety of related wireless technology standards like Bluetooth Low Energy and IEEE 802.15.4 (Zigbee), the CyberRF chip is equipped with different frequency bands (433MHz, 868MHz, 2.4GHz) and various possibilities for modulation.

Task Fields

Thanks to the advanced development state, evermore possibilities arise for demonstrating the performance capability of the transceiver in realistic applications. This requires the integration of the chip into different host systems (among others: Linux, Android, RIOT OS) on one side and the development of the actual application (for example: setup of a wireless sensor network) on the other side. In this context, students are constantly sought, who want to work on the different upcoming tasks within the scope of a thesis. Strong programming skills matching the respective task are expected (Driver: C | Application: C, C++, Java). Knowledge in the field of wireless communications is beneficial, but not always mandatory.



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