

## **Abstract**

Sometimes, it is very complicated to reconfigure sensors within industrial sensor systems after they were built in. This problem, which a developer faces pretty often, inspired me on the basic idea of making an application which helps to modify the program on my sensor. First, a device that would give a platform for the application is needed. At Department of Measurement and Information Systems (MIT) of Budapest University of Technology and Economics, a microcontroller based platform called „MIT MÓT” is used. Therefore it was convenient to use this particular platform to implement my application. This MIT MÓT has an industrial radio frequency interface, which allows to build up a sensor system from these devices.

The purpose of this thesis is the following. First, it is supposed to provide a description to the reader about basic embedded system design concepts. Second, it describes the mechanism of this reconfiguration process through an easy example. And finally, it may serve as a hint for designing a future application. In this thesis, I worked out an application which is able to reconfigure a microcontroller via a radio frequency interface and take part in the realization of a sensor system.