

## 2. Abstract

Firstly, I am presenting the FlexRay communication protocol with the emphasis on the FlexRay cycle and frames. This is necessary because I was examining software modules, which realize the FlexRay communication in embedded automotive environment. After that, I am presenting the related standard, which is the AUTOSAR standard. Additionally, I am explaining the reasons and the main features. For example, particular configuration possibilities. After that, I am presenting some of the FlexRay software modules in details.

The aforementioned modules are used by entities of higher-level abstraction, these are the software components, which implement the business logic. I am introducing their static and dynamic properties. In my thesis these components are the drivers of the tests.

After that, I am writing about the testing basics and the motives behind it. It is needed because my task was to make sure about the proper behaviour of the FlexRay modules.

Finally, I am presenting the structure of the test project and some test cases with the particular solutions. I am showing examples, which are interesting in different aspects of the integration test project.