Abstract

In the automotive industry, changes in standard families are keeping pace with emerging new needs and features. These newer and newer versions of standards increasingly optimize performance. Changes must also be followed by automotive supplier companies.

During my dissertation, I implemented the recently released 4.3.0 software version of the XCP diagnostic protocol according to the AUTOSAR standard. During my task, I also learned about how the module works, the protocols associated with the module, the protocols associated with the module and the previous 4.0.3 version. I looked for changes between the two versions and planned the changes.

After completing the design, I modified the static and dynamic code in the implementation so that it would work properly according to the new version. After the implementation, I tested the completed module. I created test cases by driving all parts of the implemented module according to the functional module test. I corrected the errors detected during the test in the implementation and possibly in the test.

I got acquainted with the process of testing on the target platform. I was not able to perform the testing on the target platform due to the virus situation, but the thesis can be complete without it. I also discussed this with the consultant and the supervisor.