Opponent opinion on Master thesis

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Opponent: Ing. Matouš Bartl

Master thesis topic:

Universal Ethernet to SPI communication module for transmission of control messages and upgrade microcontroller software

This thesis deals with the communication technology used in rail vehicles. In the first part, author deals with the analysis of the current situation, used industrial interfaces and industrial modules.

The second part deals with analysis of the development of the communication module, choice of components and development of software. It also deals with the issue of development of the test device which author used for software development. Here it can be seen that author understood the assignment and chose a suitable solution. The program for the communication module appears to be robust and optimized for the desired use.

In the last section, the author proves the module features by tests. For this chapter, I mentioned that the detected interference author could expect, however, as stated in the thesis

The thesis has good quality but contains a some grammatical mistakes. I recommend the Master thesis for defense with mark: B

he has managed to eliminate it. Author does not say how long the climatic chamber tests took.

The author should answer the following questions:

Why was not used directly the host system to communicate with the ENC28J60? How long tooks the tests in the climatic chamber?

Ing. Matouš Bartl

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