

# REVIEWER'S OPINION OF FINAL THESIS

#### I. IDENTIFICATION DATA

Thesis name: CAN FD Gateway
Author's name: Srinath Rangarajan

**Type of thesis:** master

Faculty/Institute: Faculty of Electrical Engineering (FEE)

**Department:** Department of Measurement

**Thesis reviewer:** Jaromír Krecl **Reviewer's department:** Škoda Auto a.s.

#### II. EVALUATION OF INDIVIDUAL CRITERIA

## Assignment ordinarily challenging

Evaluation of thesis difficulty of assignment.

The work includes a design and implementation of HW solution and SW for CAN-FD Gateway, including device testing. The work requires theoretical and practical experience in the fields of CAN bus, microprocessor technology, programming and testing.

## Satisfaction of assignment

## fulfilled with minor objections

Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.

According to the assignment, the author should design and implement a functional sample of the CAN-FD gateway, which was fulfilled. I have minor objections about insufficient testing of the entire device.

## Method of conception

correct

Assess that student has chosen correct approach or solution methods.

I consider the procedure from the theoretical analysis of the topic through the design, implementation and testing of the solution to be correct.

#### Technical level C - good.

Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.

Both the practical and the introductory theoretical part show a good professional level. The description of the theoretical part shows the author knowledge in the field of communications; the practical part shows the author's experience in the design and implementation of electronic circuits.

## Formal and language level, scope of thesis

C - good.

Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.

Formally, I have no fundamental objections, I consider the level of English to be sufficient in terms of understanding the content of the work.

#### Selection of sources, citation correctness

B - very good.

Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.

I have no objections about working with sources, the author works with them in accordance with the rules.

#### Additional commentary and evaluation



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Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.

Please insert your commentary (voluntary evaluation).

I evaluate handed thesis with classification grade C - good.

#### III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation. Please present apt questions which student should answer during defense.

Overall, the work can be divided into two parts - theoretical and practical. I have no fundamental objections about the theoretical part; this is a review work from available sources. In the practical part, consisting of the design and implementation of HW and SW application, I positively evaluate the method of implementation, requiring practical experience with the design of electronic circuits. I have reservations about insufficient testing of the resulting device. In a situation where functional SW is applied to new HW, in my opinion it is necessary to perform detailed tests, not only functional but also stress tests. If the device is intended for testing the car communication, it is necessary to verify that the device itself does not bring errors caused by exceeding the maximum load, time delay, etc.

Date: <b>18.1.2021</b>	Signature:	