

I. IDENTIFICATION DATA

Thesis title:	FastIC+ ASIC Interface
Author's name:	Bc. Vojtěch Vosáhlo
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Department of Microelectronics
Thesis reviewer:	doc. Ing. Daniel Valúch, PhD.
Reviewer's department:	Accelerator systems department, CERN, Geneva, Switzerland

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment <i>How demanding was the assigned project?</i>	ordinarily challenging
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Fulfilment of assignment <i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	fulfilled
The assigned tasks have been fulfilled and set goals achieved.	

Methodology <i>Comment on the correctness of the approach and/or the solution methods.</i>	correct
The proposed approach was appropriate and led to a successful completion of the task.	

Technical level <i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	A - excellent.
Student started his assignment in a complex environment of high rank scientific laboratory. It is always challenging to get familiar with advanced projects and technology, the student had done a great job.	

Formal and language level, scope of thesis <i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	C - good.
Thesis is organized in a logical way; the language level is very good. However, I find the text very brief. Introduction provides 1-2 sentences per topic, some results are later presented by maximum 1-2 short sentences (which are structured as chapters). I would expect much more thorough introduction into the project and purpose of the work. In a very brief text of chapters 2 to 4, a datasheet is cited regularly as reference [1]. I was not able to find it to get better understanding of the device and the project. Provided this device is targeting broad audience, I assume it is not something proprietary. Many abbreviations are not properly explained, making it difficult to read the text for someone already not familiar with the subject. I believe much more effort could have been invested here, making the thesis better.	

Selection of sources, citation correctness <i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	C - good.
30 sources are cited, all but one are datasheets, or links to the author's own work. It may suggest the author focused solely on implementation of the electronics and software, rather than getting a broader understanding of the context the project is used in. The project and quality of the thesis would profit.	

Additional commentary and evaluation (optional)

Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.

I have no additional comments.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

Summarize your opinion on the thesis and explain your final grading. Pose questions that should be answered during the presentation and defense of the student's work.

Student was designing hardware and software to read out data from FastIC+ ASIC designed by the Microelectronics group at CERN. Purpose of the work was to ease the chip testing and evaluation at CERN and to provide an accessible platform for researchers and engineers from other institutes, or schools.

He successfully fulfilled the assignment.

The technical work, methodology and results look very good. However I find the thesis, which is a documentation of the effort, and can be considered a manual for the future users of the chip and the board rather brief. More content would definitely be a plus.

The grade that I award for the thesis is **B - very good**.

Date: **25.5.2025**

Signature: