

DEPARTMENT OF INFORMATION TECHNOLOGY AND ELECTRICAL ENGINEERING

Spring Semester 2020

LATEX Report Template

Semester Project / Master Project

Titlepage Logo Placeholder

Pierre-Hugues BLELLY pblelly@student.ethz.ch

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Supervisors: Matheus Cavalcante, matheusd@iis.ee.ethz.ch

Samuel Riedel, sriedel@student.ethz.ch

Professor: Prof. Luca Benini, lbenini@ethz.ch

Acknowledgements

Ceci est un test de mon script

Abstract

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Declaration of Originality

I hereby confirm that I am the sole author of the written work here enclosed and that I have compiled it in my own words. Parts excepted are corrections of form and content by the supervisor. For a detailed version of the declaration of originality, please refer to Appendix ??

Pierre-Hugues BLELLY, Zurich, May 2020

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List of Acronyms

AES Advanced Encryption Standard

ASIC Application-Specific Integrated Circuit

DES Data Encryption Standard

 $\ensuremath{\mathsf{DVI}}$ Device Independent File Format

ECC Elliptic Curve Cryptography

ECDSA Elliptic Curve Digital Signature Algorithm

EPS Encapsulated PostScript

FPGA Field Programmable Gate Array

IC Integrated Circuit

IIS Integrated Systems Laboratory

LED Light-Emitting Diode

NIST National Institute of Standards and Technology

PDF Portable Document Format

WYSIWYG . . . What You See Is What You Get



Introduction

- 1.1 Heterogeneous systems
- 1.2 Design Issue with heterogeneous systems
- 1.3 Currently Available Workflow for Halide
- 1.4 Image processing and why Halide may be interesting



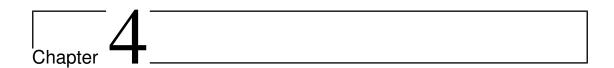
Preliminaries / Background

- 2.1 Hero
- 2.2 Halide Language
- 2.2.1 Programing model
- 2.2.2 Available Functionnalities
- 2.2.3 Porting Halide to new Platforms
- 2.3 Compilation Workflow



Design Implementation

- 3.1 Matrix Multiplication
- 3.2 Schedule Implementation



Results

- 4.1 Test Setup
- 4.2 Comparaison between OpenMp and Halide on the different platforms



Conclusion and Future Work

Draw your conclusions from the results you achieved and summarize your contributions. Comparisons (e.g., of hardware figures) with related work are also appropriate here. Point out things that could or need to be investigated further.

5.1 First Section

5.2 Second Section

Glossary

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