



UNIVERSITY OF TRENTO
DEPARTMENT OF PHYSICS

Developments of a FPGA-based Intel 8080 Mockup Soft Microprocessor

Leonardo Cattarin

Laboratory of Advanced Electronics
Professor: Ricci Leonardo

1 Introduction

Motivation, what a microprocessor is, what is the Von Neumann architecture vs Harvard architecture *Description of the General Features* *Description of an assembly language* *Block scheme of the device*

1.1 Sample Subsection

Sample Text [1]

2 Implementation

description of the principles of construction *high level description of the modules* *In Depth description of the CPU structure* *comments on the number of minimal instructions* *comments on the debug interface implementation* *Block scheme/image of CPU internal registers and buses* *scheme of states for some instructions?*

2.1 Sample Subsection

Sample Text [1]

3 Instruction Set and Code Development

explanation of the problem *implementation and explanation of the code*

3.1 Sample Subsection

Sample Text [1]

4 Conclusion

References

¹N. Surname, *Text Title*, <https://sampletext.noex>, 2021.