

Assignment Group 6

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Abstract—This paper will dive in four different implementation of the insertion sort algorithm. They four implementations are FSMD (Finite State Machine with Data path), ASIP (Application-Specific Instruction-set Processor), C (software-based implementation) and Custom IP (hardware-based implementation). They will be explained and afterwards compared under the following aspects:

I. INTRODUCTION

This document is a model and instructions for L^AT_EX. Please observe the conference page limits.

II. INSERTIONSORT

III. IMPELMTATIONS

A. *FSMD*

B. *ASIP*

C. *C coding in Vitis*

D. *Create custom IP block*

IV. COMPARISON

A. *aspect 1*

B. *aspect 2*

C. *aspect 3*

D. *aspect 4*

ACKNOWLEDGMENT

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