Digital System Design KU

Summer term XXXX

**Title**

Design Document v1.0

Editors: Name1

Name2

Submission Date:

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# Introduction

Should deal with the following questions/answer the following questions:

* in which domain will your chip be used
* what constraints exist in this application domain, e.g. limited power budget, demand for security, throughput, …
* why is it useful to realize it in hardware
* do comparable solutions already exist, if yes what improvement do you expect
* …

# Specification

* Specify the functionality, environment, costs (in terms of chip metrics like area, power consumption)
* Partition the system’s functionality into subtasks
* Explore alternative hardware and software trade-offs
* Decide on interfaces and protocols for data exchange
* Decide on data formats, operating modes, exception handling, etc.
* Define, model, evaluate and refine the various subtasks

# Architecture

Draw a block diagram visualizing the architecture (early sketch) of your design.