# Pong Game

Assignment date: 04.07.2016
Submission date: 24.07.2016
Group members: Sebastian Wittka, Felix Kaiser and Habib Gahbiche.

# Contents

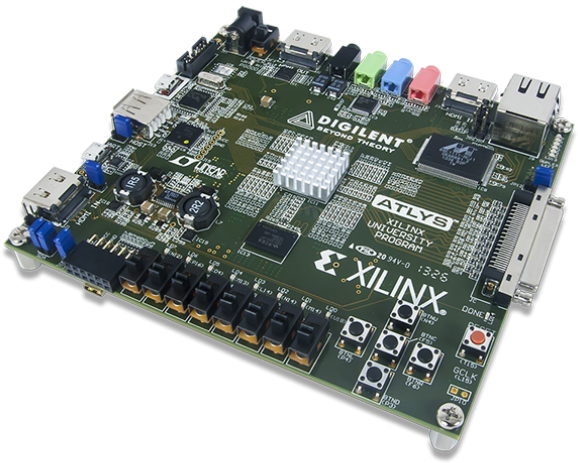
# 1 Topic

## 1.1 Brief Task Description

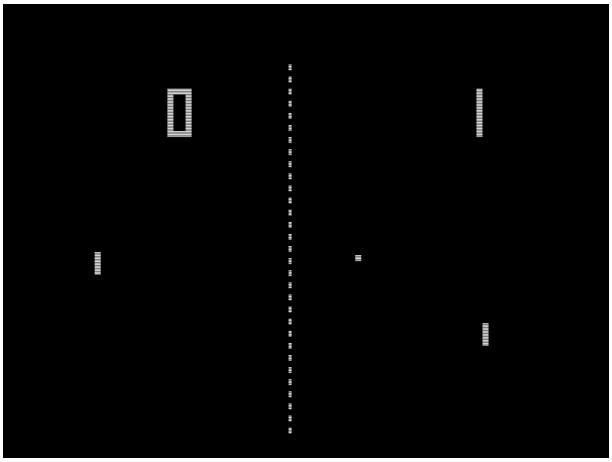
This project is about implementing the game Pong on the Atlys Spartan-6 FPGA board. Pong is a two dimensional multiplayer game that simulates table-tennis. Each of the two players controls an in game paddle by moving it vertically in order to hit a ball back and forth. A player scores a point when the opponent fails to return the ball.

We also took advantage of the built-in HDMI port and the AC-97 Codec to produce a better image and audio quality output.

Figure 1 shows a picture of the used board, and a screenshot of the (yet to be) realized game.




(a) Atlys Spartan-6 board



(b) Screenshot of the game Pong

Figure 1: Used board and screenshot of the game

## 1.2 Block Diagram

## 1.3 Functional Details

# 2 Implementation

## 2.1 Modules

## 2.2 Results

### 2.2.1 Synthesis and Implementation results

## 2.3 Problems

# 3 Assessment

# 4 Summary

# 5 Attachment