

Pong Game

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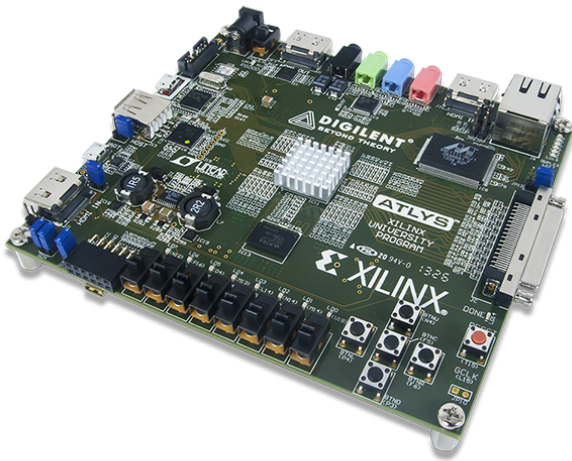
1 Topic

1.1 Brief Task Description

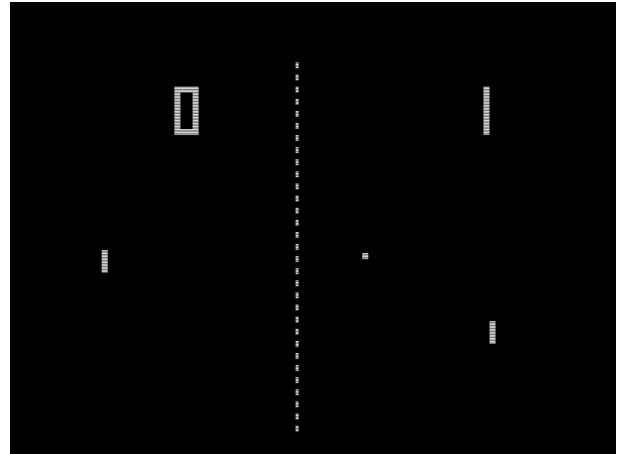
This project is about implementing the game Pong on the Atlys Spartan-6 FPGA board. Pong is a two dimensional multiplayer game that simulates table-tennis. Each of the two players controls an in game paddle by moving it vertically in order to hit a ball back and forth. A player scores a point when the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