

ECE385 Final Project Report

Frogger in System Verilog

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May 4th, 2016

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I. INTRODUCTION

The basic premise of Frogger is to navigate frogs across the street/water without dying. A frog may die by either colliding with a moving car or falling in the water. There are a total of three frogs that the user must navigate to the other end of the map, and once all three frogs move to their particular ending location, the user wins. If a user dies three times, then the game is over.

This system was developed in System Verilog in Quartus-II on an Altera-DE2-115 FPGA Board, and used software drivers developed in C to communicate with a USB keyboard (to be used as the controller).

II. LIST OF FEATURES

III. BLOCK DIAGRAM

IV. PURPOSE OF MODULES

V. CIRCUIT SCHEMATICS

VI. FINITE STATE MACHINES

VII. COLOR & SPRITE GENERATION

VIII. DIFFICULTY

IX. CONCLUSION

X. FIGURES

APPENDIX