

FPGA Tetris

My project will be a recreation of Tetris on an FPGA. Tetris is a puzzle game where the player controls a sequence of falling shapes, dubbed Tetrominoes. The Tetrominoes must be stacked neatly within a 10x20 grid. Every filled row of blocks grants points and clears said row from the screen. When the screen is inevitably filled with partially filled rows, the player loses.

In order to input movement commands, I will interface the FPGA with an original NES controller. The FPGA will display the game state via VGA on a monitor. An audio module will output music and sound effects when appropriate. Once the core gameplay logic is established, I will implement a high score tracker, and a difficulty selector / progressive difficult incrementor.