Proposal: Tetris Game Emulator

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Introduction

Our project goal is to implement a Tetris game emulator. Tetris is a famous game all around the globe.

In Tetris, players complete lines by moving differently shaped pieces (<u>tetrominoes</u>), which descend onto the playing field. The completed lines disappear and grant the player points, and the player can proceed to fill the vacated spaces. The game ends when the playing field is filled. The longer the player can delay this outcome, the higher their score will be. In multiplayer games, players must last longer than their opponents; in certain versions, players can inflict penalties on opponents by completing a significant number of lines. [1]

The project will attempt to emulate the Tetris game by using FPGA, SystemVerilog, and other necessary tech components.



Goal

The goal is to successfully finished the system according to the instruction graph above.

Milestones:

- 1. Successfully build the game on the software level.
- 2. Connect the software with FPGA and VGA.
- 3. Connect the system with the PS2 keyboard and finished the system.

Reference:

1. "Tetris." Wikipedia, Wikimedia Foundation, 25 Feb. 2022, https://en.wikipedia.org/wiki/Tetris.