

## ***ABSTRACT***

### ***PACMAN GAME WITH JOYSTICK AND AUDIO CONTROLLER ON CONSOLE GAME BASED FPGA***

Game consoles are needed by console game developers to develop or create game consoles. Therefore it is necessary to make the console game hardware itself to make it easier for game developers to make games. This final project is limited to making FPGA kits into a game console that can play games.

With the use of FPGA resources of 3621 logic elements from 18752 available or 19% logic cell and 122880 memory bits from 239616 available memory bits or 51% memory bits. Pacman games can be created as desired and allow it to be developed again.

The final goal of this final project is to create a game console from FPGA that can be used to play pacman games using a joystick and produce game sound effects. The game console will run well if it can be controlled with a joystick and generate sound effects.

**Keywords:** *Game Console, FPGA, Joystick, Audio Controller, Pacman*