2010 R&E: Computer System Education & Research

Lab 5. Sequential Logic Design

Design the following logic using the Moore FSM.

Toy Snail

Take an 1 input from KEY2 and a 2 input from KEY3. Display the sequence of 1 and 0 in LEDG0 ~ LEDG3. If the sequence "1101" is taken as input, the smile output (indicated with "0") should be displayed in the HEX0 seven segment.

1. Implement the Toy Snail with **Schematic**.
2. Implement the Toy Snail using **Verilog-HDL**.