

Design Final Presentation

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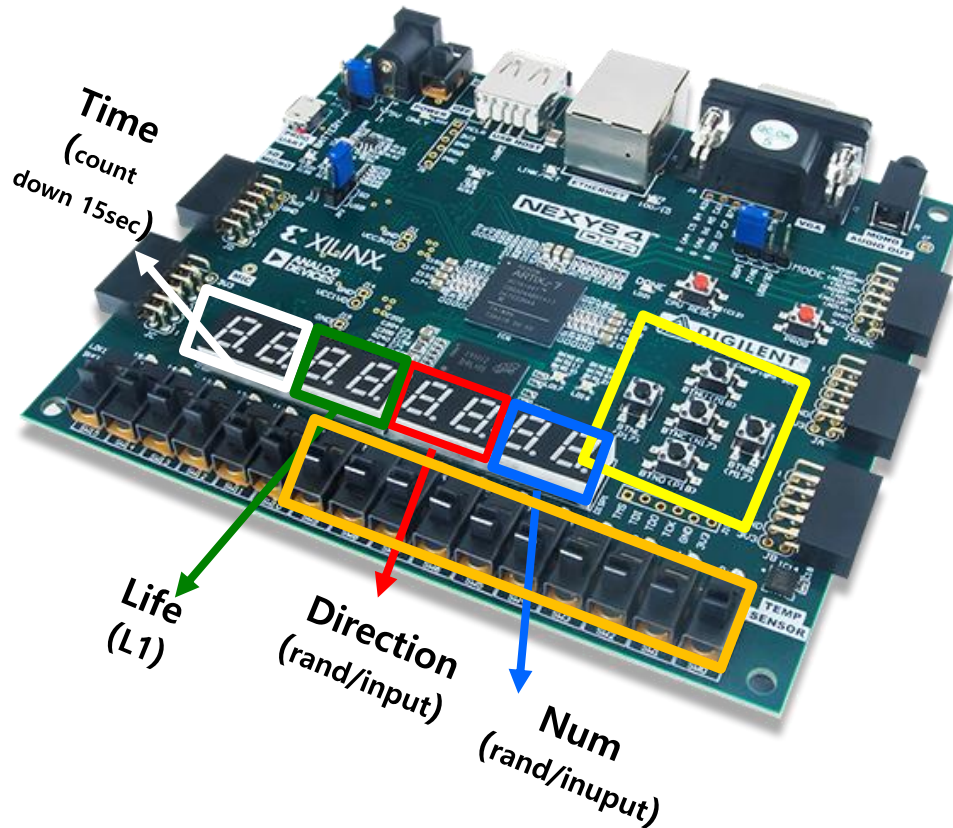
1. Design intent and functionality

- **Design Purpose**

: Implement a game where players find mines by looking at the directions and numbers displayed on the screen and using buttons and slide switches.



1. Design intent and functionality



< Input >

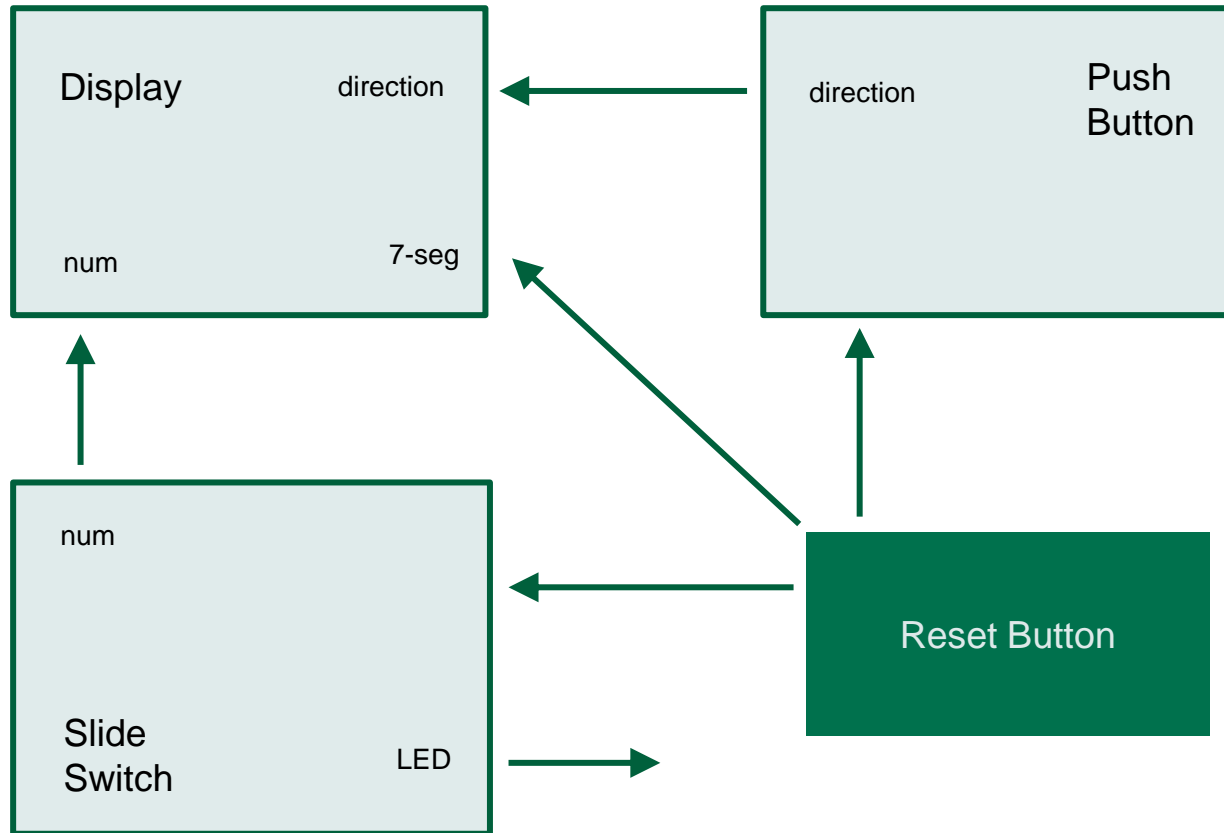
- ① **push button** ●
 - U/D/C/L/R direction buttons
- ② **slide switch** ●
 - Number buttons

< Output >

- ③ **time** ○
 - Indicate time limit
- ④ **life** ●
 - Indicate Life (0 death/1 alive)
 - When player couldn't find mine, life \leq life-1
- ⑤ **direction** ●
 - Indicate the direction of mine
 - UP/DOWN/CENTER/LEFT/RIGHT
- ⑥ **num** ●
 - Indicate the number of mine



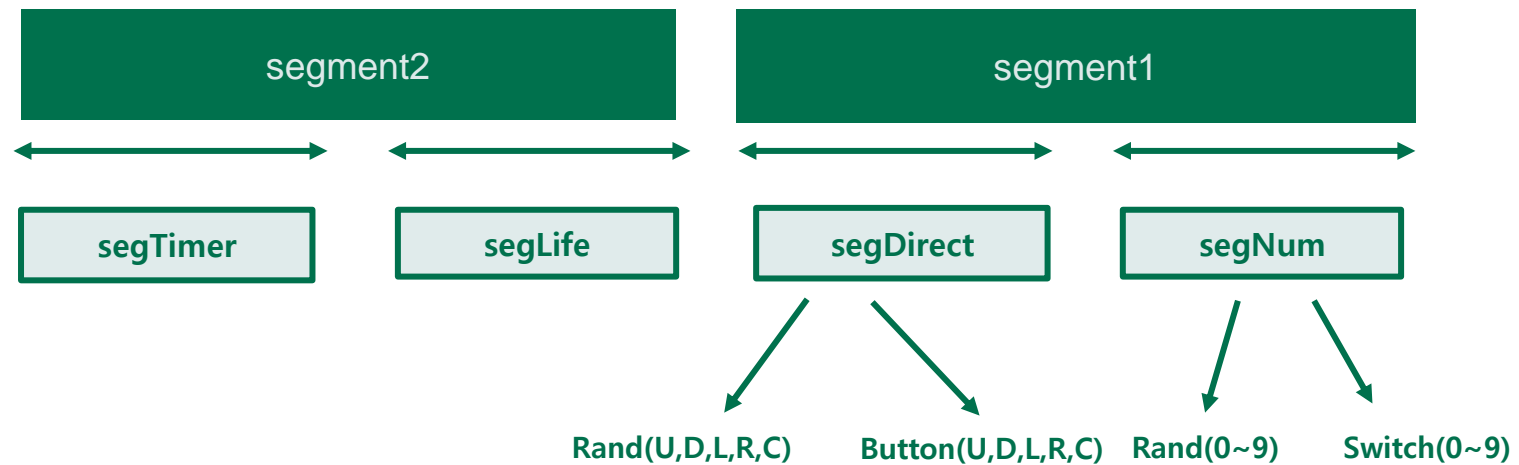
2. Top Level Block Diagram



3. Top level Block Diagram

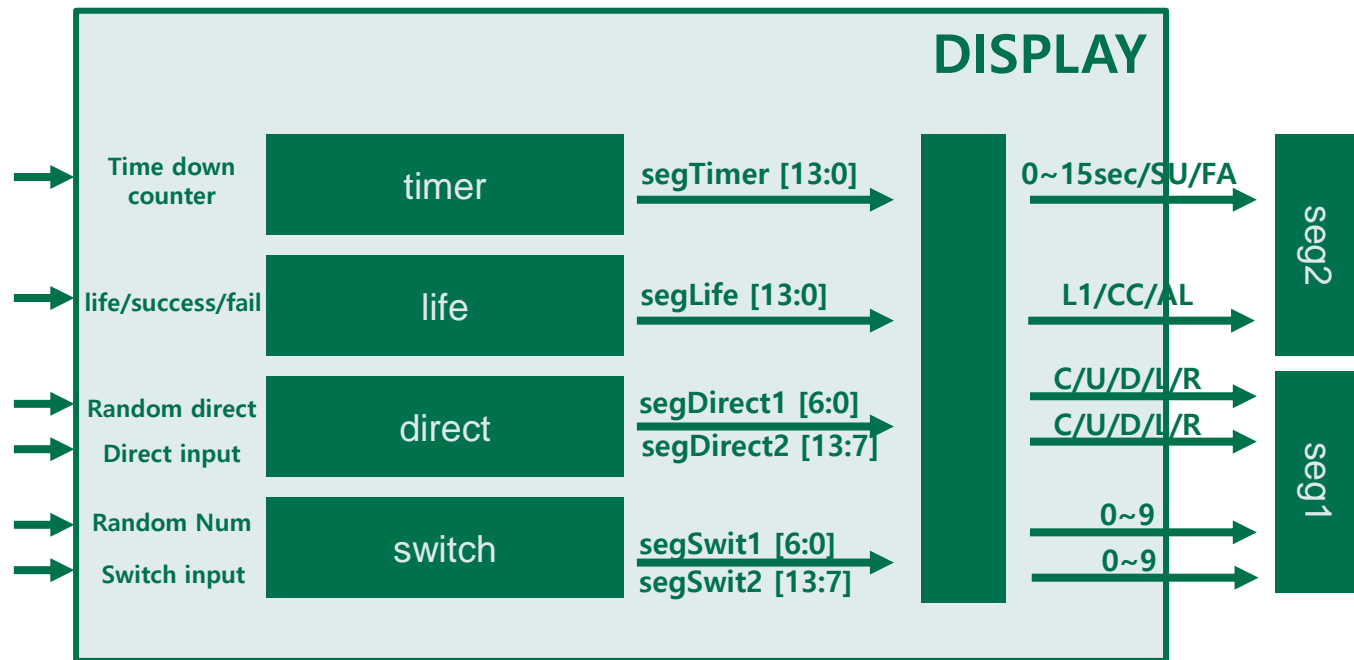
1) DISPLAY

DISPLAY



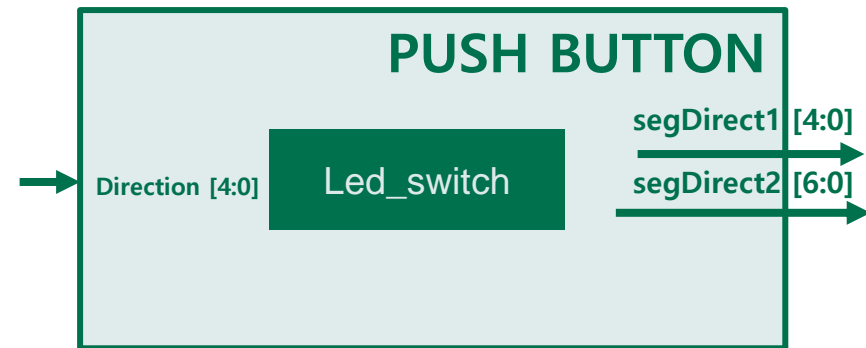
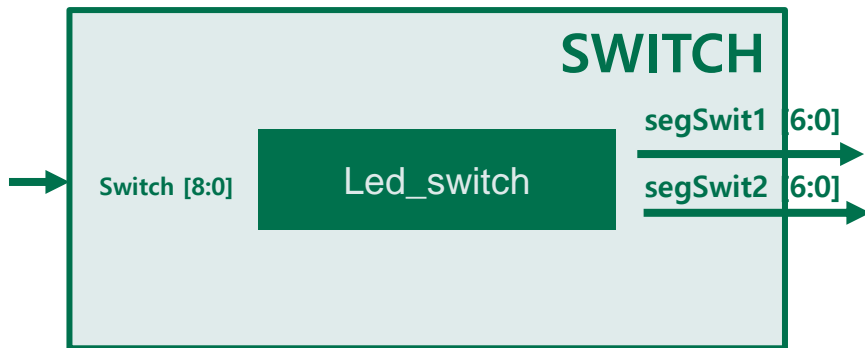
3. Top level Block Diagram

1) DISPLAY

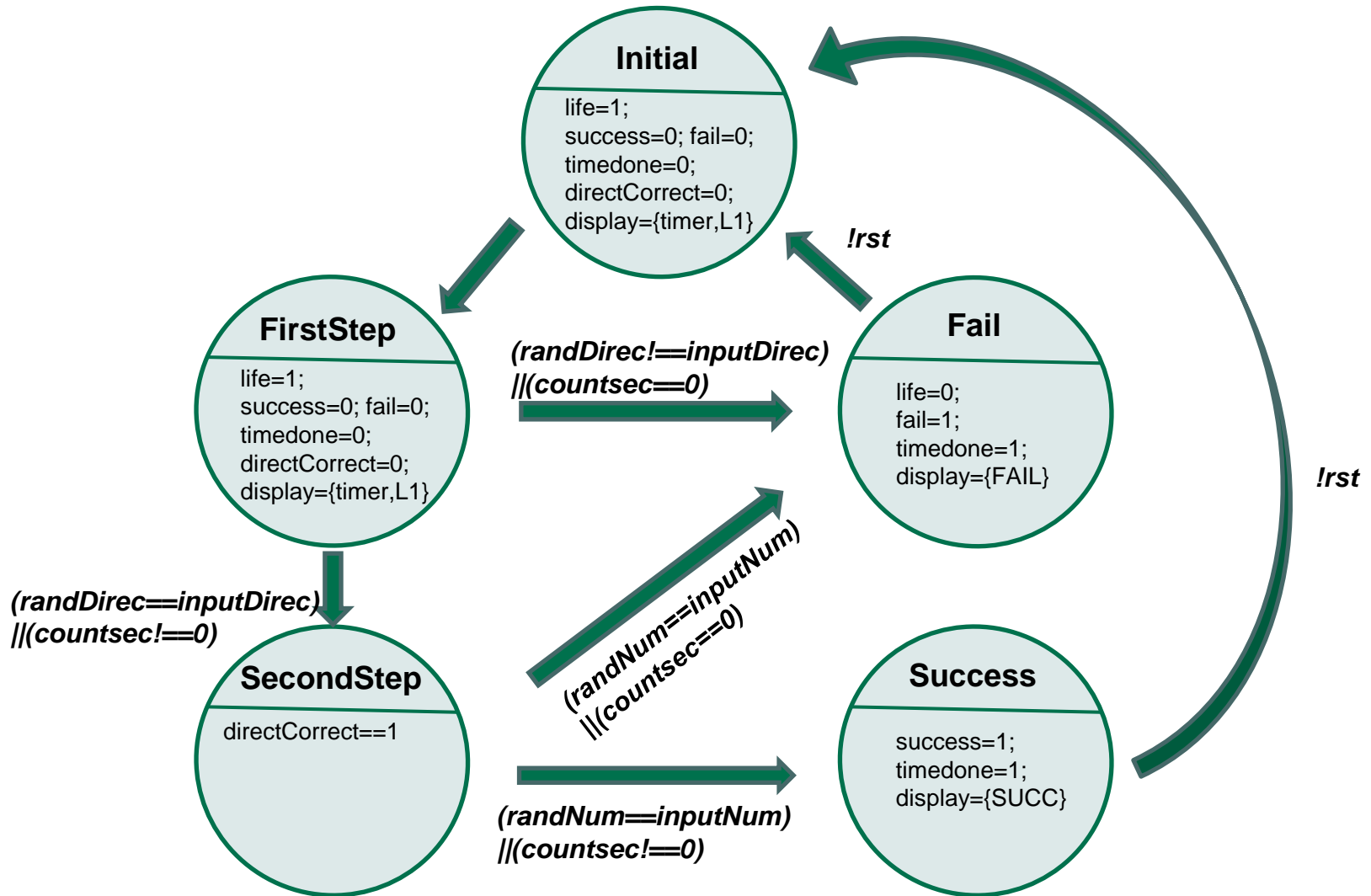


3. Top level Block Diagram

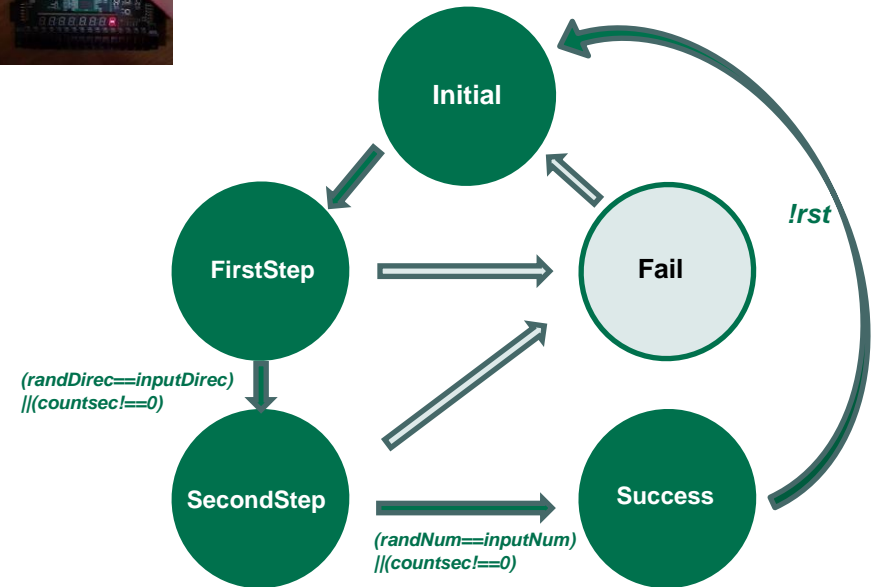
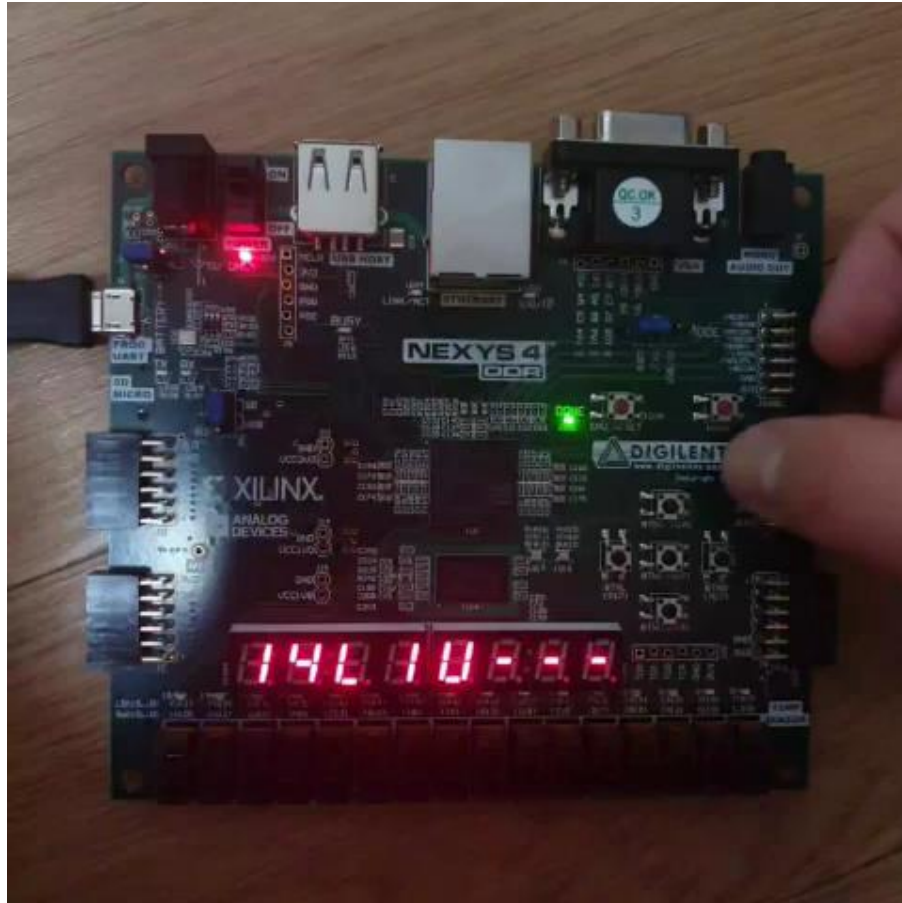
2) SLIDE SWITCH & PUSH BUTTON



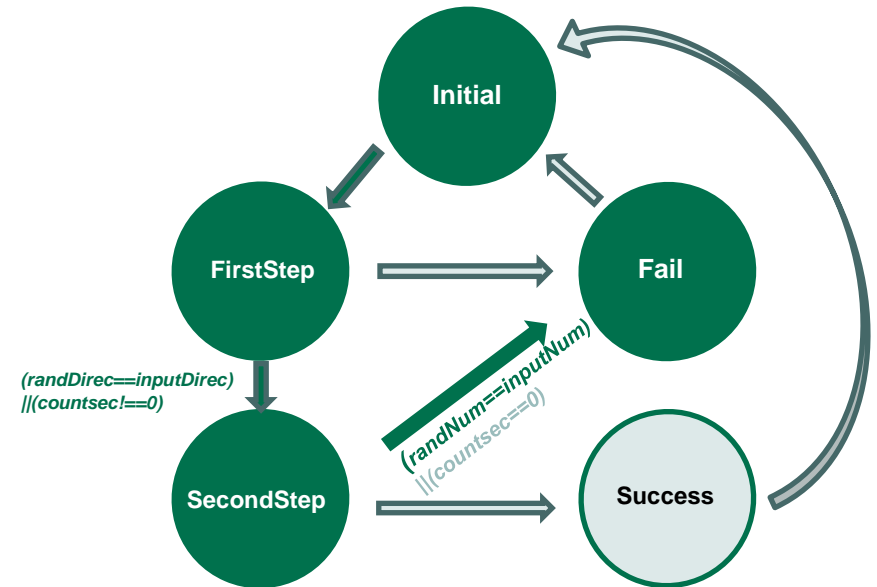
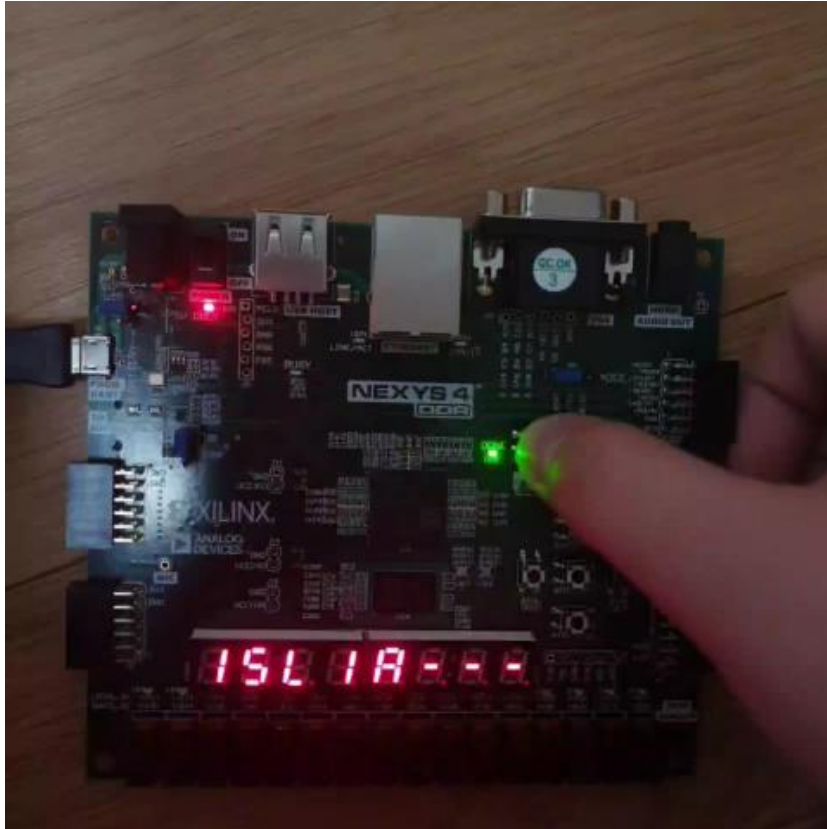
3. State machine



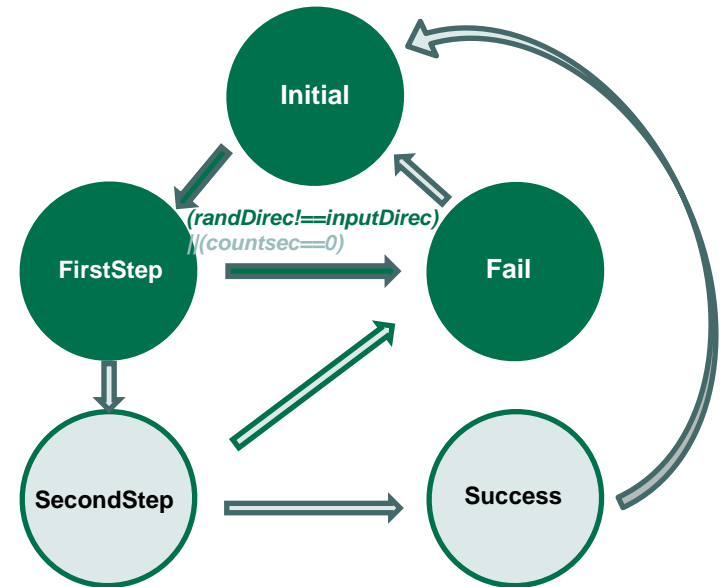
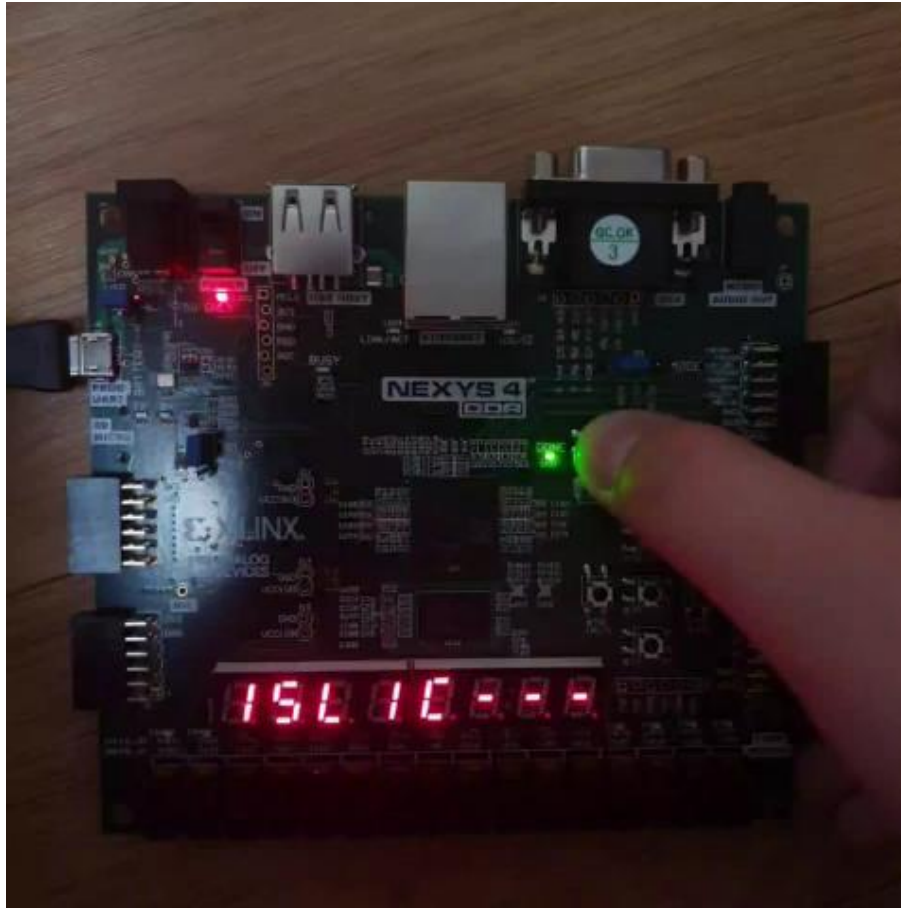
4. Demo video : case1 (Success)



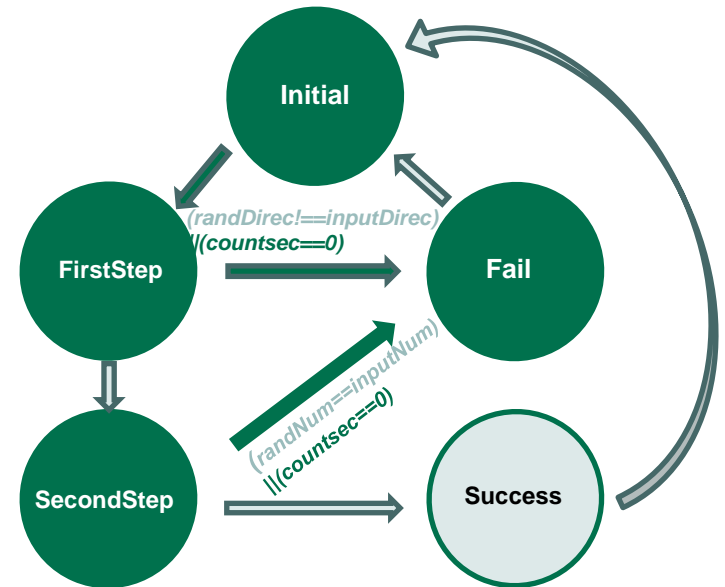
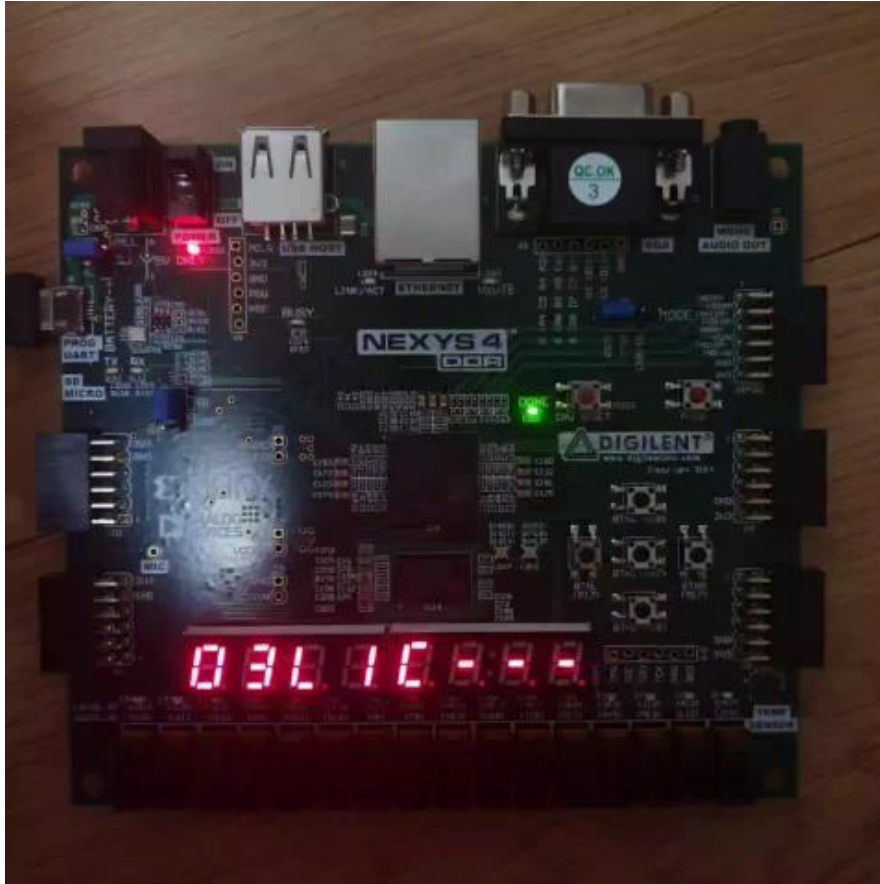
4. Demo video : case2 (Fail with Switch number)



4. Demo video : case3 (Fail with Button direction)



4. Demo video : case4 (Fail with Time out)



5. Question

