Four Digit Seven Segment Display

Design Description:

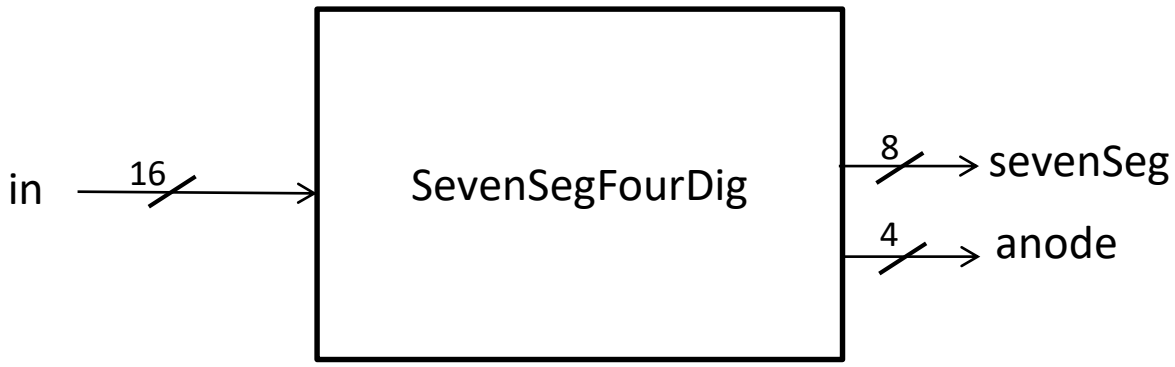
- This design is a driver circuit for four digit seven segments displays.

Design I/O:

in: 16 bits hex. Input for four digit

sevenSeg: 8 bits output for seven segments display

anode: 4 bits output to activate seven segments displays one by one



Design Behavior:

- There are 4 displays. Each 4 bits input out of 16 are for one of the display.
- You need to update them within an order. To do that you need 16 bits counter at least.
- When counter[15:14] == 00, you should drive first display. To do that you should assign anode = 4'b0111;
- When counter[15:14] == 01, you should assign anode = 4'b1011; to drive second display.
- When counter[15:14] == 10, you should assign anode = 4'b1101; for third one.
- When counter[15:14] == 11, you should assign anode = 4'b1110; for last one.