ingleDigit

bit4To7seg_singleDigit.v

```
/** 4 bit binary to 7 segment encoder
    - hex output
    - active low

    @Param z least significant
    @Param w most significant
    @Return 1-9 A-F
*/
module bit4To7seg_singleDigit(
        input w,x,y,z,
        output reg a,b,c,d,e,f,g
    );
    always @ (w,x,y,z) begin
        case ({w,x,y,z})
            4'b0000: {a,b,c,d,e,f,g} = 7'b0000001; //0
            4'b0001: {a,b,c,d,e,f,g} = 7'b1001111; //1
            4'b0010: {a,b,c,d,e,f,g} = 7'b0010010; //2
            4'b0011: {a,b,c,d,e,f,g} = 7'b0000110; //3
            4'b0100: {a,b,c,d,e,f,g} = 7'b1001100; //4
            4'b0101: {a,b,c,d,e,f,g} = 7'b0100100; //5
            4'b0110: {a,b,c,d,e,f,g} = 7'b0100000; //6
            4'b0111: {a,b,c,d,e,f,g} = 7'b0001111; //7
            4'b1000: {a,b,c,d,e,f,g} = 7'b0000000; //8
            4'b1001: {a,b,c,d,e,f,g} = 7'b0001100; //9
            4'b1010: {a,b,c,d,e,f,g} = 7'b0001000; //A
            4'b1011: {a,b,c,d,e,f,g} = 7'b1100000; //b
            4'b1100: {a,b,c,d,e,f,g} = 7'b0110001; //C
            4'b1101: {a,b,c,d,e,f,g} = 7'b1000010; //d
            4'b1110: {a,b,c,d,e,f,g} = 7'b0110000; //E
            4'b1111: {a,b,c,d,e,f,g} = 7'b0111000; //F
        endcase
    end
endmodule
```

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	tatu	From	To	Assignment Name	Value	Enabled	En
1	✔		out b	Location	PIN_E15	Yes	
2	✔		out c	Location	PIN_C15	Yes	
3	✔		out d	Location	PIN_C16	Yes	
4	✔		out e	Location	PIN_E16	Yes	
5	✔		out f	Location	PIN_D17	Yes	
6	✔		out g	Location	PIN_C17	Yes	
7	✔		in w	Location	PIN_C12	Yes	
8	✔		in x	Location	PIN_D12	Yes	
9	✔		in y	Location	PIN_C11	Yes	
10	✔		in z	Location	PIN_C10	Yes	
11	✔		out a	Location	PIN_C14	Yes	
12		<<new>>	<<new>>	<<new>>			