

```
timescale 1ns / 1ps
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
// Company:
// Engineer:
//
// Create Date: 04/19/2021 04:03:04 PM
// Design Name:
// Module Name: hex7seg
// Project Name:
// Target Devices:
// Tool Versions:
// Description:
//
// Dependencies:
//
// Revision:
// Revision 0.01 - File Created
// Additional Comments:
//
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
```

```
module hex7seg(
    input [3:0] n,
    input e,
    output [6:0] seg
);
    wire D = ~n[0];
    wire d = n[0];
    //Might need to invert these. Who knows, maybe they'll work.
    //A
    m8_1e A (.in({1'b0, d, d, 1'b0, 1'b0, D, 1'b0, d}), .sel(n[3:1]), .e(e),
.o(seg[0]));
    // F
    m8_1e F (.in({1'b0, d, 1'b0, 1'b0, d, 1'b0, 1'b1, d}), .sel(n[3:1]), .e(e),
.o(seg[5]));
    //B
    m8_1e B (.in({1'b1, D, d, 1'b0, D, d, 1'b0, 1'b0}), .sel(n[3:1]), .e(e),
.o(seg[1]));
    //G
    m8_1e G (.in({1'b0, D, 1'b0, 1'b0, d, 1'b0, 1'b0, 1'b1}), .sel(n[3:1]), .e(e),
.o(seg[6]));
    //E
    m8_1e E (.in({1'b0, 1'b0, 1'b0, d, d, 1'b1, d, d}), .sel(n[3:1]), .e(e),
.o(seg[4]));
    //C
```

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        m8_1e C (.in({1'b1, D, 1'b0, 1'b0, 1'b0, 1'b0, D, 1'b0}), .sel(n[3:1]), .e(e),  
.o(seg[2]));  
        //D  
        m8_1e Dx (.in({d, 1'b0, D, d, d, D, 1'b0, d}), .sel(n[3:1]), .e(e), .o(seg[3]));  
endmodule
```