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//status: APPEARS TO WORK
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module LED_Shifter(  
    input In,  
    input CE,  
    input R,  
    input clk,  
    output [15:0] Q  
);  
  
    wire [15:0] led;  
    FDRE #(.INIT(1'b0) ) ff1  
(.C(clk), .R(R), .CE(CE), .D(In),  
    .Q(led[0]));  
    FDRE #(.INIT(1'b0) ) ff2  
(.C(clk), .R(R), .CE(CE),  
.D(In&led[0]), .Q(led[1]));  
    FDRE #(.INIT(1'b0) ) ff3  
(.C(clk), .R(R), .CE(CE),  
.D(In&led[1]), .Q(led[2]));  
    FDRE #(.INIT(1'b0) ) ff4  
(.C(clk), .R(R), .CE(CE),
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.D(In&led[2]), .Q(led[3]));
    FDRE #(.INIT(1'b0) ) ff5
(.C(clk), .R(R), .CE(CE),
.D(In&led[3]), .Q(led[4]));
    FDRE #(.INIT(1'b0) ) ff6
(.C(clk), .R(R), .CE(CE),
.D(In&led[4]), .Q(led[5]));
    FDRE #(.INIT(1'b0) ) ff7
(.C(clk), .R(R), .CE(CE),
.D(In&led[5]), .Q(led[6]));
    FDRE #(.INIT(1'b0) ) ff8
(.C(clk), .R(R), .CE(CE),
.D(In&led[6]), .Q(led[7]));
    FDRE #(.INIT(1'b0) ) ff9
(.C(clk), .R(R), .CE(CE),
.D(In&led[7]), .Q(led[8]));
    FDRE #(.INIT(1'b0) ) ff10
(.C(clk), .R(R), .CE(CE),
.D(In&led[8]), .Q(led[9]));
    FDRE #(.INIT(1'b0) ) ff11
(.C(clk), .R(R), .CE(CE),

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.D(In&led[9]), .Q(led[10]));
    FDRE #(.INIT(1'b0) ) ff12
(.C(clk), .R(R), .CE(CE),
.D(In&led[10]), .Q(led[11]));
    FDRE #(.INIT(1'b0) ) ff13
(.C(clk), .R(R), .CE(CE),
.D(In&led[11]), .Q(led[12]));
    FDRE #(.INIT(1'b0) ) ff14
(.C(clk), .R(R), .CE(CE),
.D(In&led[12]), .Q(led[13]));
    FDRE #(.INIT(1'b0) ) ff15
(.C(clk), .R(R), .CE(CE),
.D(In&led[13]), .Q(led[14]));
    FDRE #(.INIT(1'b0) ) ff16
(.C(clk), .R(R), .CE(CE),
.D(In&led[14]), .Q(led[15]));
    assign Q = led;
endmodule

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