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1 // Top-level module that defines the I/Os for the DE-1 SoC board
2
3 module DE1_SoC (HEX0, HEX1, HEX2, HEX3, HEX4, HEX5, KEY, LEDR, SW);
4   output logic [6:0] HEX0, HEX1, HEX2, HEX3, HEX4, HEX5;
5   output logic [9:0] LEDR;
6   input logic [3:0] KEY;
7   input logic [9:0] SW;
8
9   UPC(.discounted(LEDR[1]), .stolen(LEDR[0]), .u(SW[9]), .p(SW[8]), .c(SW[7]), .m(SW[0]));
10  assign HEX0 = '1;
11  hex1 one(.bcd(SW[9:7]), .leds(HEX1));
12  hex2 two(.bcd(SW[9:7]), .leds(HEX2));
13  hex3 tre(.bcd(SW[9:7]), .leds(HEX3));
14  hex4 qua(.bcd(SW[9:7]), .leds(HEX4));
15  assign HEX5 = '1;
16 endmodule
17
18
19
```