

```
module combination(go, clock, resetn, location, colour, x_out, y_out, colour_out);
    input clock, resetn, go;
    input [6:0] location;
    input [2:0] colour;
    output [7:0] x_out;
    output [6:0] y_out;
    output [2:0] colour_out;
    wire load_x, load_y, load_colour, plot, enable;

    FSM f0(go, resetn, clock, load_x, load_y, load_colour, enable, plot);
    datapath d0(location, colour, clock, resetn, enable, load_x, load_y, load_colour,
endmodule
```