

```

1  module moor_with_default (input clk, rst, j, output w);
2      reg [2:0] ns, ps;
3
4      always @(ps,j) begin
5          ns = 3'b000;
6          case(ps)
7              3'b000: ns = j ? 3'b001 : 3'b000;
8              3'b001: ns = j ? 3'b001 : 3'b010;
9              3'b010: ns = j ? 3'b011 : 3'b000;
10             3'b011: ns = j ? 3'b100 : 3'b010;
11             3'b100: ns = j ? 3'b001 : 3'b010;
12             default: ns = 3'b000;
13         endcase
14     end
15
16     assign w = (ps == 3'b100) ? 1'b1 : 1'b0;
17
18     always @(posedge clk, posedge rst) begin
19         if (rst)
20             ps <= 3'b000;
21         else
22             ps <= ns;
23     end
24 endmodule

```

```

591  === moor_with_default ===
592
593      Number of wires:                16
594      Number of wire bits:            20
595      Number of public wires:         5
596      Number of public wire bits:     9
597      Number of memories:             0
598      Number of memory bits:          0
599      Number of processes:            0
600      Number of cells:                16
601          $_ANDNOT_                   1
602          $_AND_                       2
603          $_AOI3_                      2
604          $_DFF_PP0_                   4
605          $_DFF_PP1_                   1
606          $_NOR_                       3
607          $_NOT_                       3

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599      Number of processes:             0
600      Number of cells:                16
601      $ _ANDNOT_                      1
602      $ _AND_                          2
603      $ _A0I3_                         2
604      $ _DFF_PP0_                      4
605      $ _DFF_PP1_                      1
606      $ _NOR_                          3
607      $ _NOT_                          3

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592			16
593	Number of wires:	16	20
594	Number of wire bits:	20	5
595	Number of public wires:	5	9
596	Number of public wire bits:	9	0
597	Number of memories:	0	0
598	Number of memory bits:	0	0
599	Number of processes:	0	16
600	Number of cells:	16	1
601	\$_ANDNOT_	1	2
602	\$_AND_	2	2
603	\$_A0I3_	2	4
604	\$_DFF_PP0_	4	1
605	\$_DFF_PP1_	1	3
606	\$_NOR_	3	3
607	\$_NOT_	3	