if (count_out != rollover value)
    rollover_flag = 0;
else
    rollover_flag = 1;

[#-1:0]

count

n_rst

[#-1:0]

clear

count_enable

rollover_val

Count
logic

nxt_count

D   Q

Q

clk

[#-1:0]

count_out

rollover_val

rollover
logic

rollover_flag

if (clear)
    nxt_count = 0;
else if (!count_enalbe)
    nxt_count = count;
else if (count == rollover_val)
    nxt_count = 1;
else
    nxt_count = count + 1;