

```

module sync_rd2wr #(parameter width =8, depth = 7)
  (input[depth:0] rptr,input clk_in,reset,flush, output reg[depth:0]
  r2wsync_ff2);
  reg [depth:0] r2wsync_ff1;

  always @(posedge clk_in, negedge reset)
  begin
    if(!reset)
    begin
      r2wsync_ff2 <= 0 ;
      r2wsync_ff1 <= 0 ;
    end
    else
    begin // $display("b4syn r2w",rptr );
      r2wsync_ff1 <= rptr ;
      r2wsync_ff2 <= r2wsync_ff1;// $display("aftr syn
r2w",r2wsync_ff2 );
    end
  end

endmodule

```