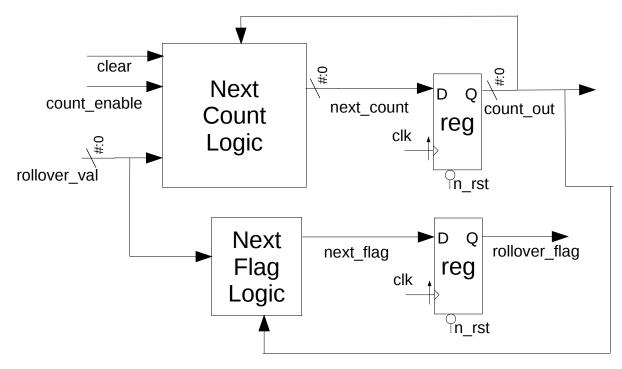
Lab3 Flexible Counter RTL Diagram



Next Count Logic:

If clear is asserted, set next_count to 0. If count_enable is asserted, check if count_out equals rollover_val. If it does, set next_count to 1, otherwise increment next_count. If neither clear nor count_enable is asserted, next_count equals count out.

Next Flag Logic:

If count out equals rollover val, next flag is 1, otherwise next flag is 0.