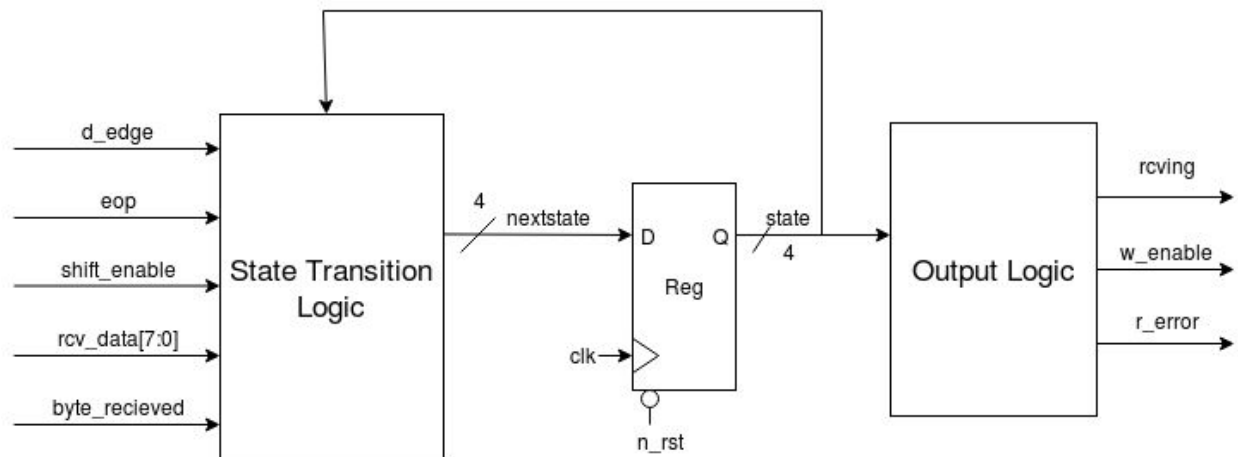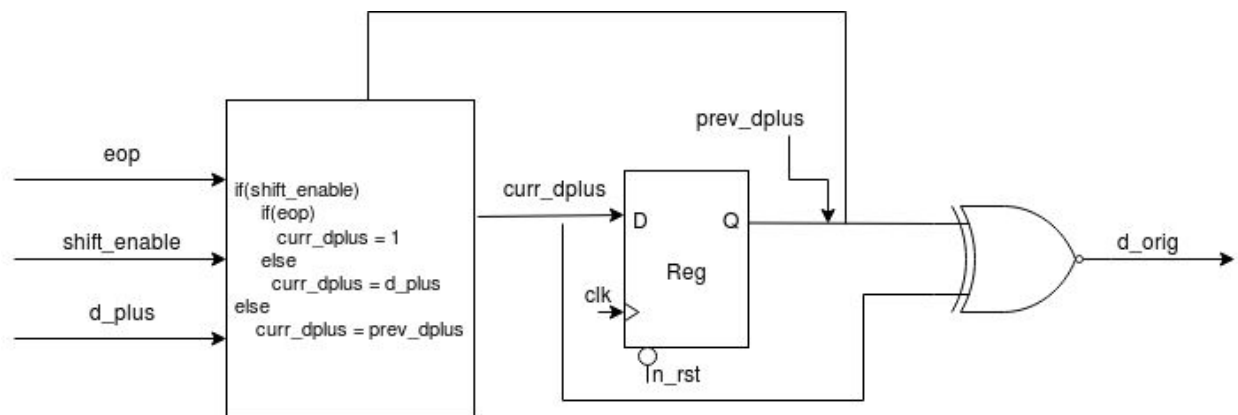RCU State Transition Diagram:
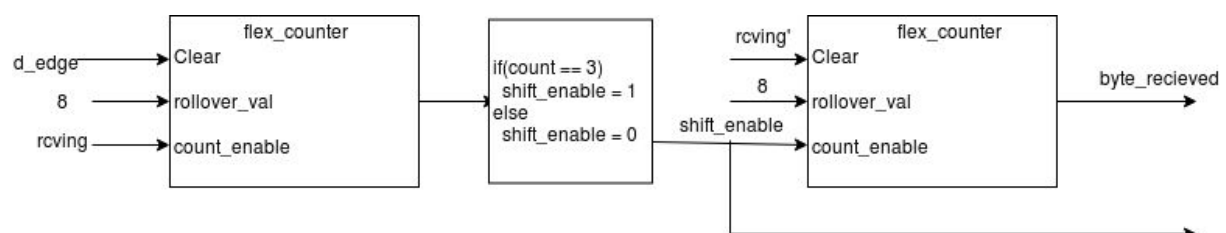
RTL diagram for Controller Block:
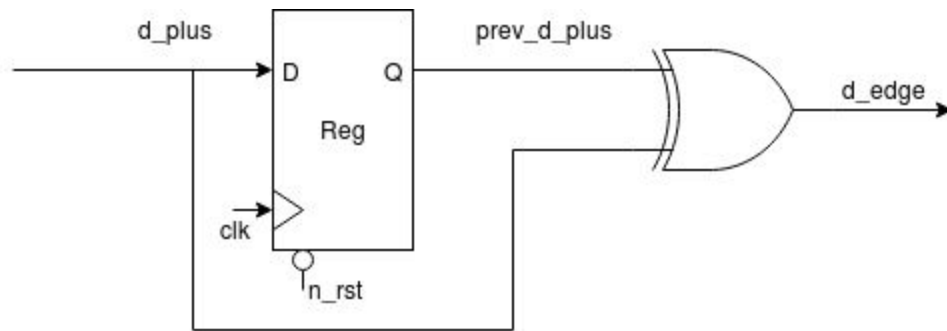

RTL diagram for the Decode block:

Functional Block Diagram for timer block:

Edge-detect schematic:

d_plus   D   Q   prev_d_plus

Reg

clk

n_rst

d_edge

Eop_detect schematic:

d_plus

eop

d_minus