

if dout == space

get character's current Y coordinate

subtract 1 from character's current Y coordinate

send character's current Y coordinate - 1 to RAM as address

wr_rd = 1 <-- read

--> this will take 1 clock cycle

if returned value is 1

character doesn't move into this space => do nothing

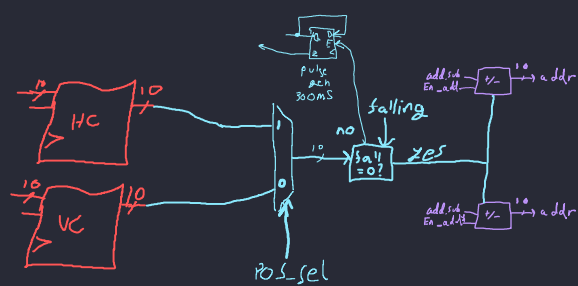
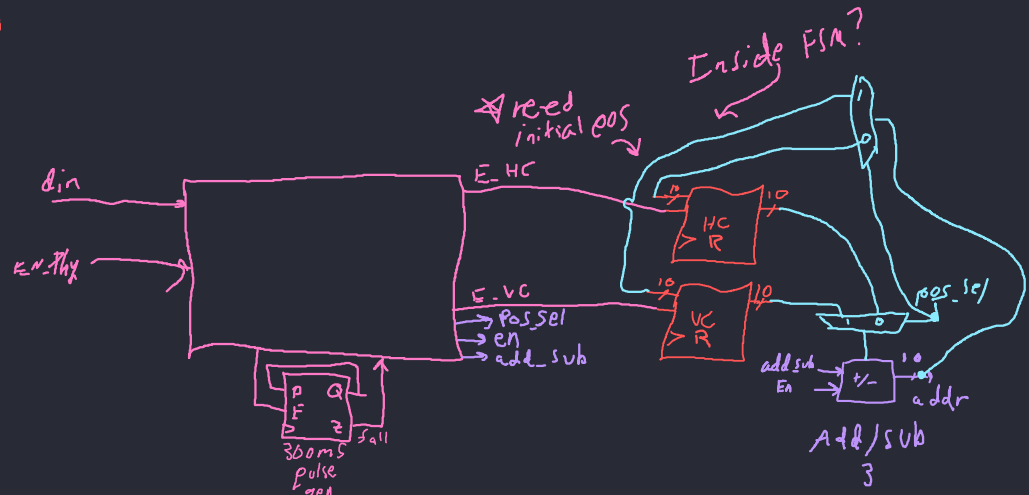
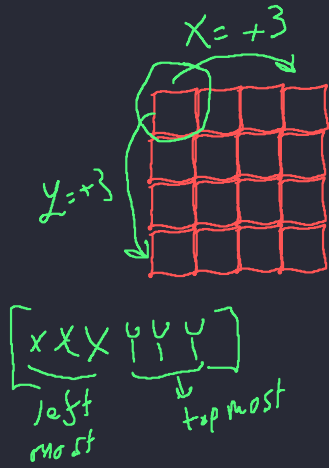
else

decrease character's Y coordinate by 1

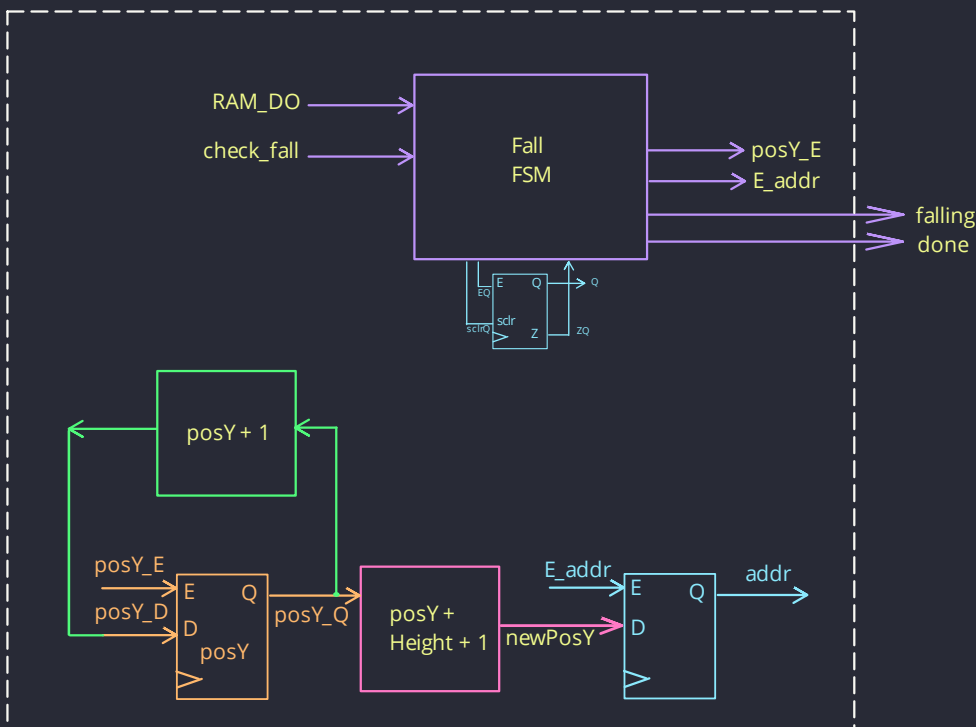
character's new position is stored in register

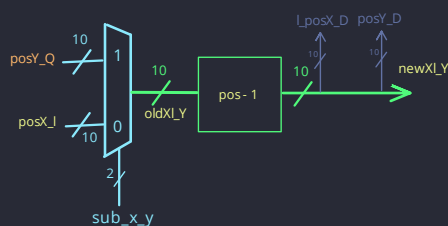
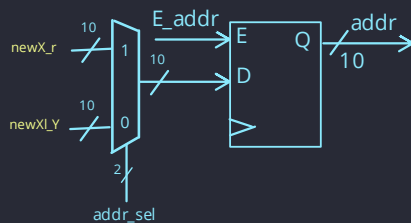
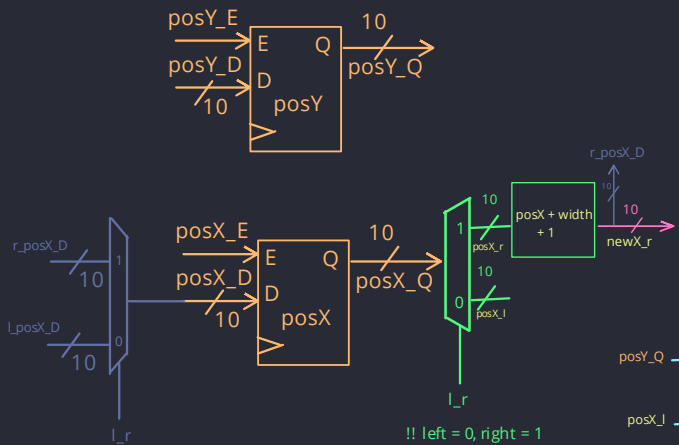
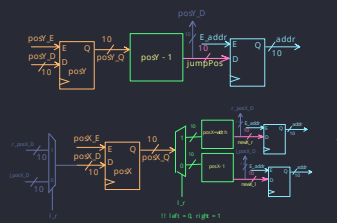
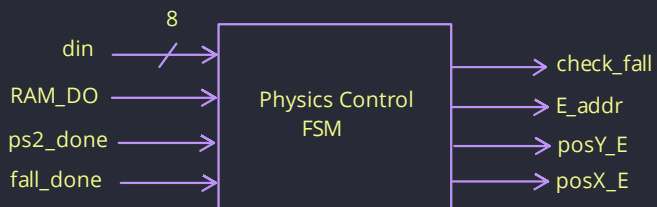
key 6 8

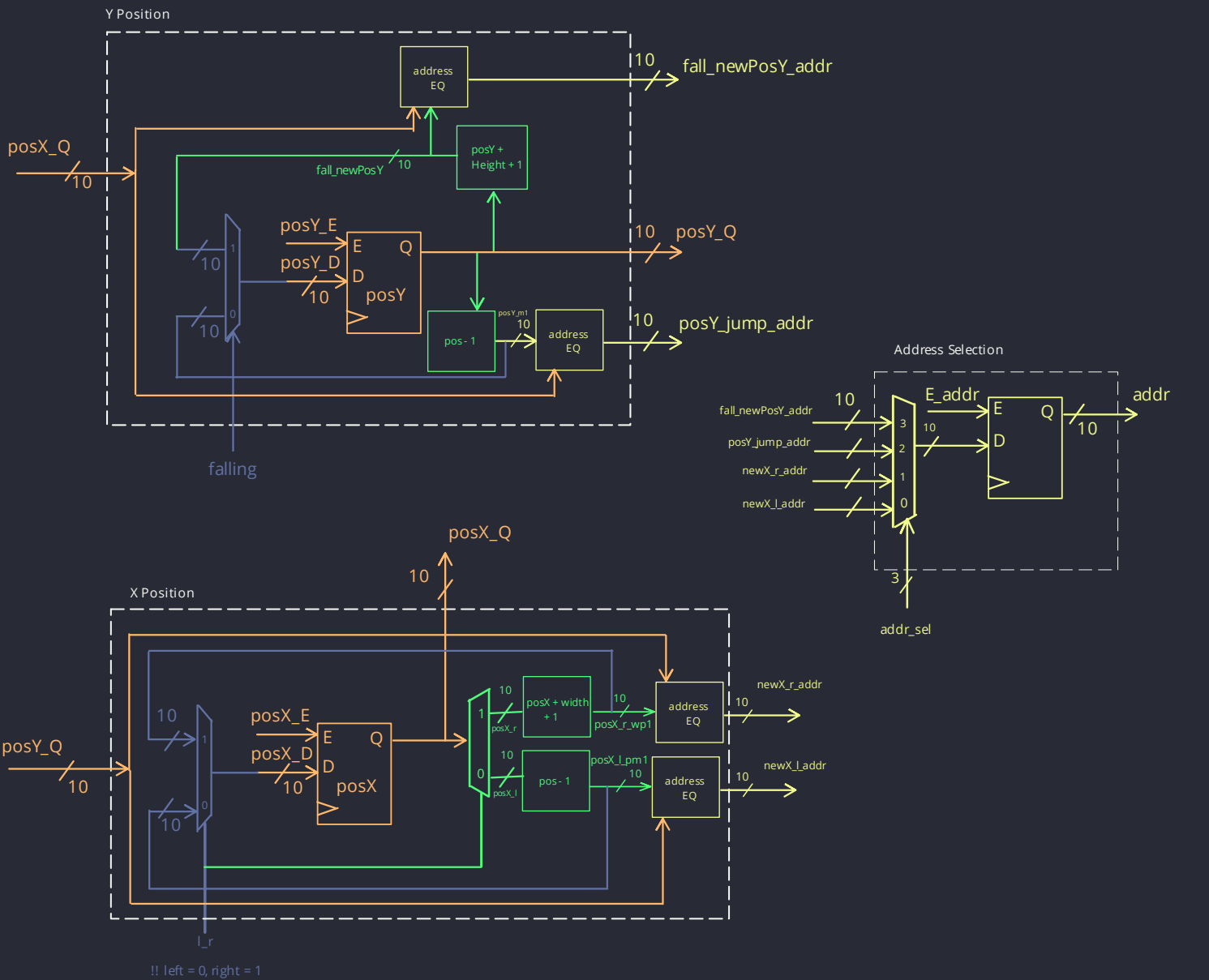
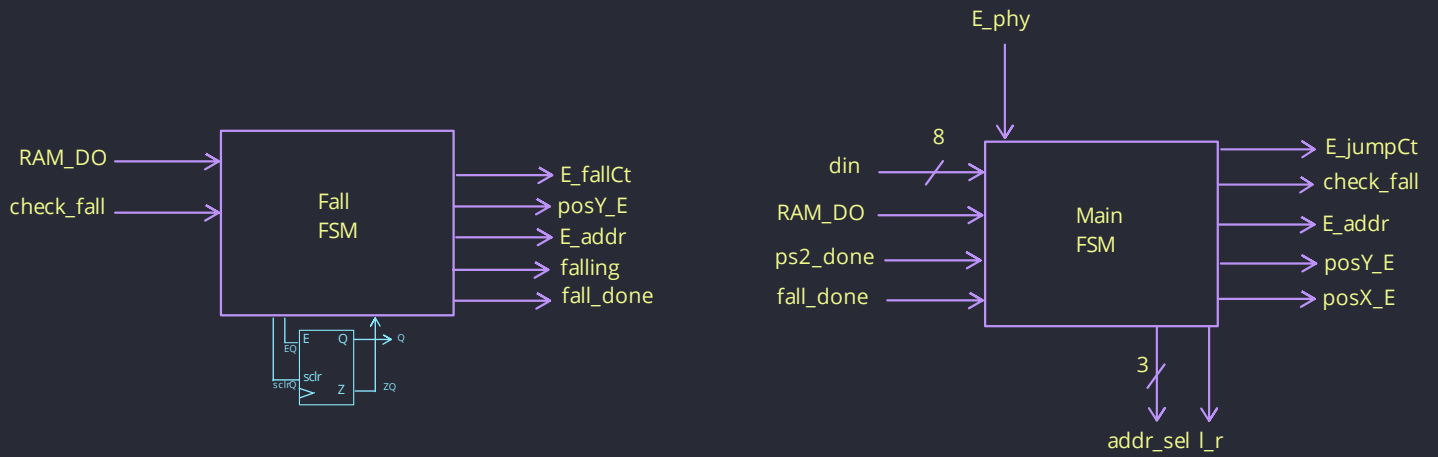
En



Fall Control







address EQ definitions: { address = VC * 640 + HC }

falling: address = fall_newPosY * 640 + posX_Q
 jumping: address = posY_m1 * 640 + posX_Q
 moving right: address = posY_Q * 640 + newX_r
 moving left: for moving left): address = posY_Q * 640 + newX_l_Y