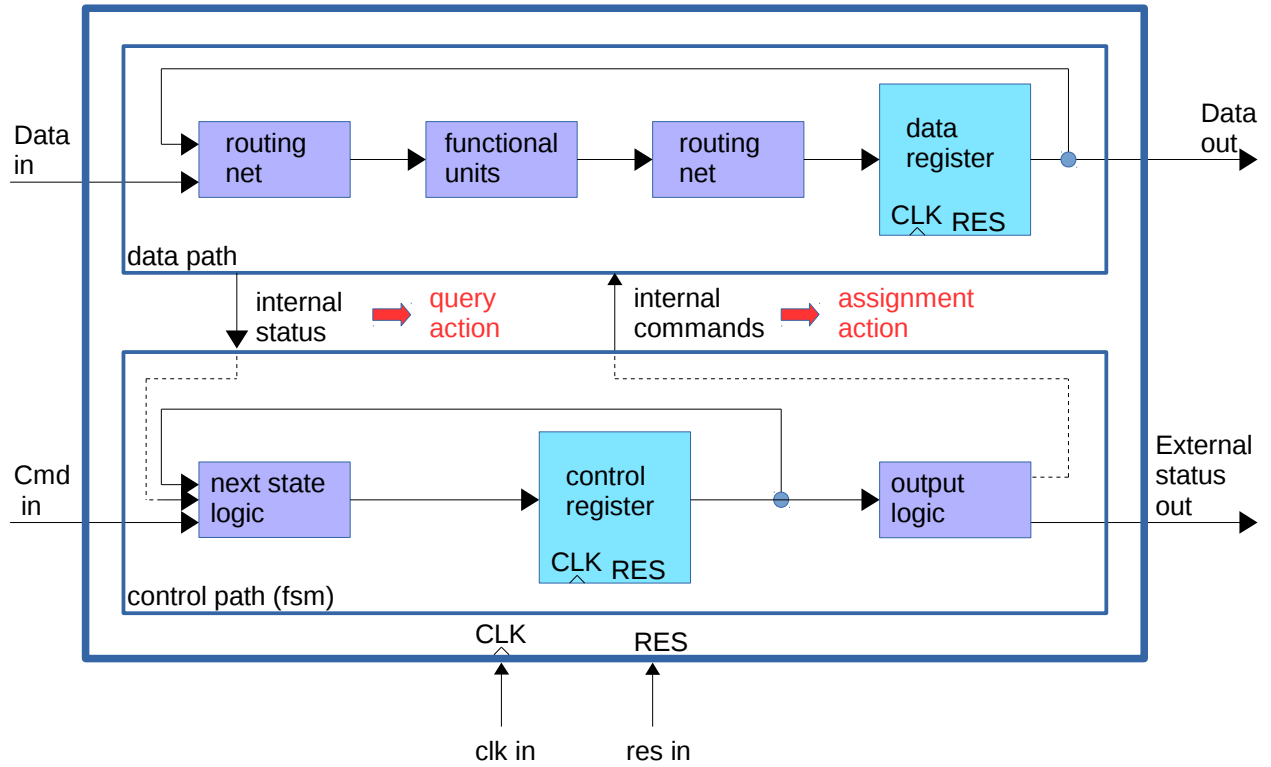
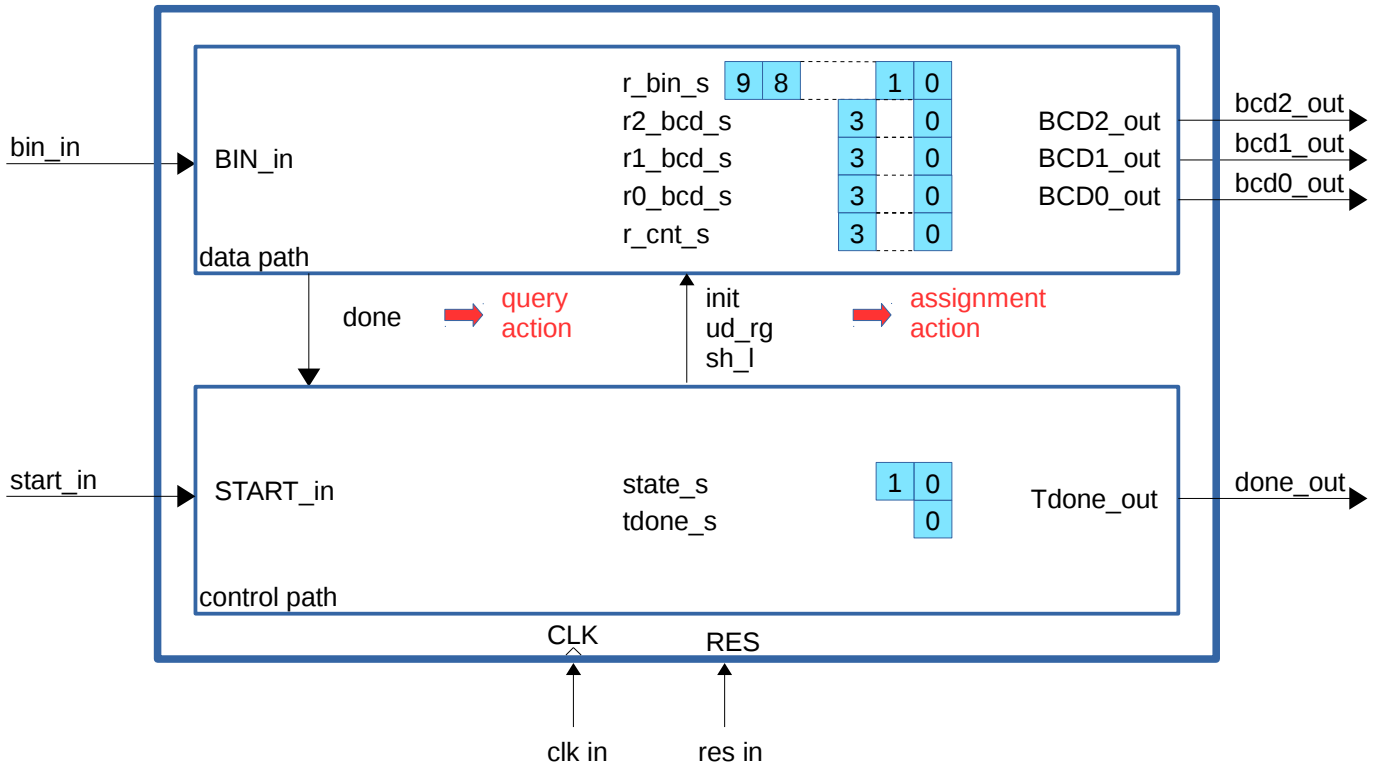
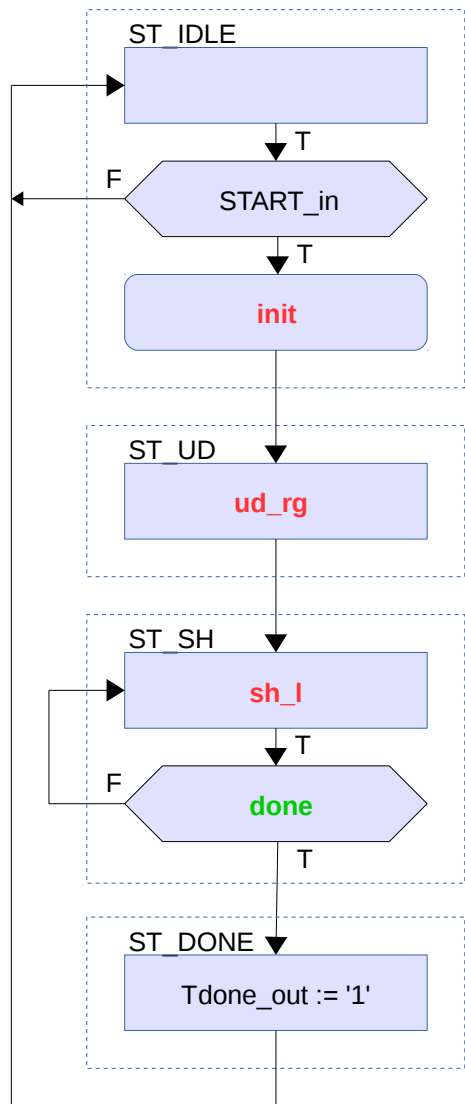


CONTROL.- DATA-PATH MODEL



bin_bcd_ser





state	action	comment
ST_IDLE	: init	--initialize
	START_in : r_cnt_s ← 10	
	START_in : r2_bcd_s ← 0	
	START_in : r1_bcd_s ← 0	
	START_in : r0_bcd_s ← 0	
	START_in : r_cnt_s ← 0	

condition → (points to START_in in the first column)
 register transfer → (points to the ← symbol in the first column)

ST_UD : ud_rg --update register
 r2_bcd_s > 4 : r2_bcd_s ← r2_bcd_s + 3

ST_SH : sh_l --shift left
 : r2_bcd_s ← r2_bcd_s(2:0) & r1_bcd_s(3)

ST_SH : done --done
 r_cnt_s = 0 :