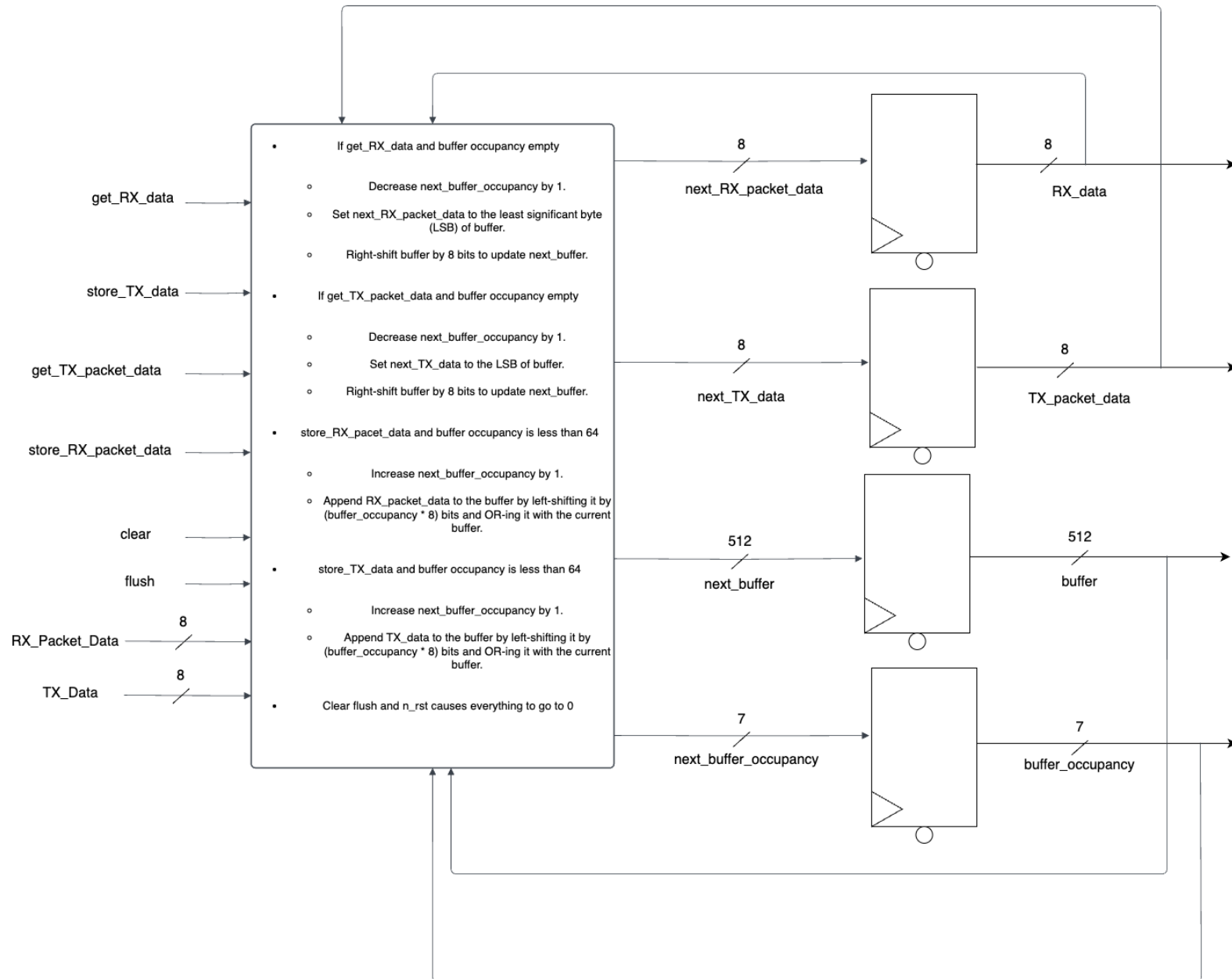
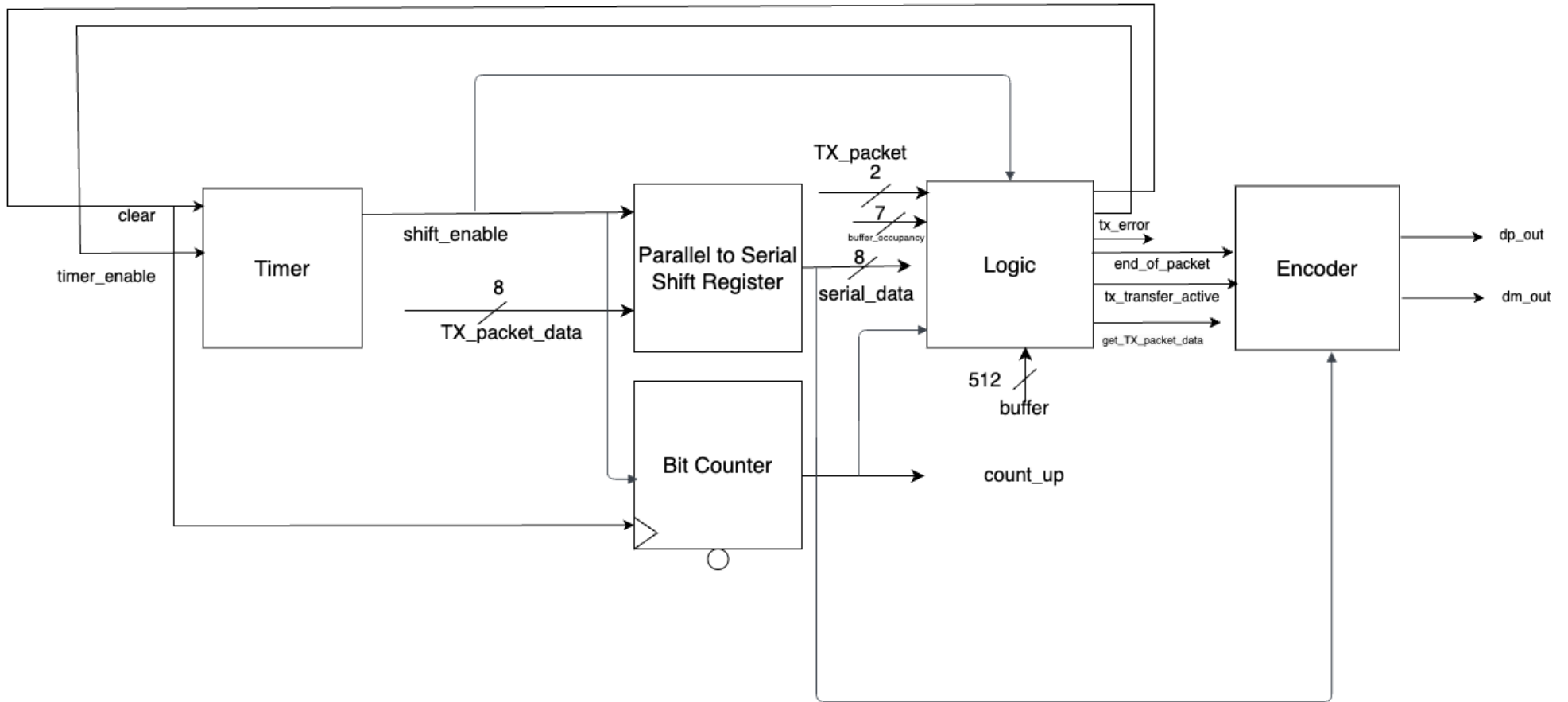


Group 11 Submission DATA BUFFER

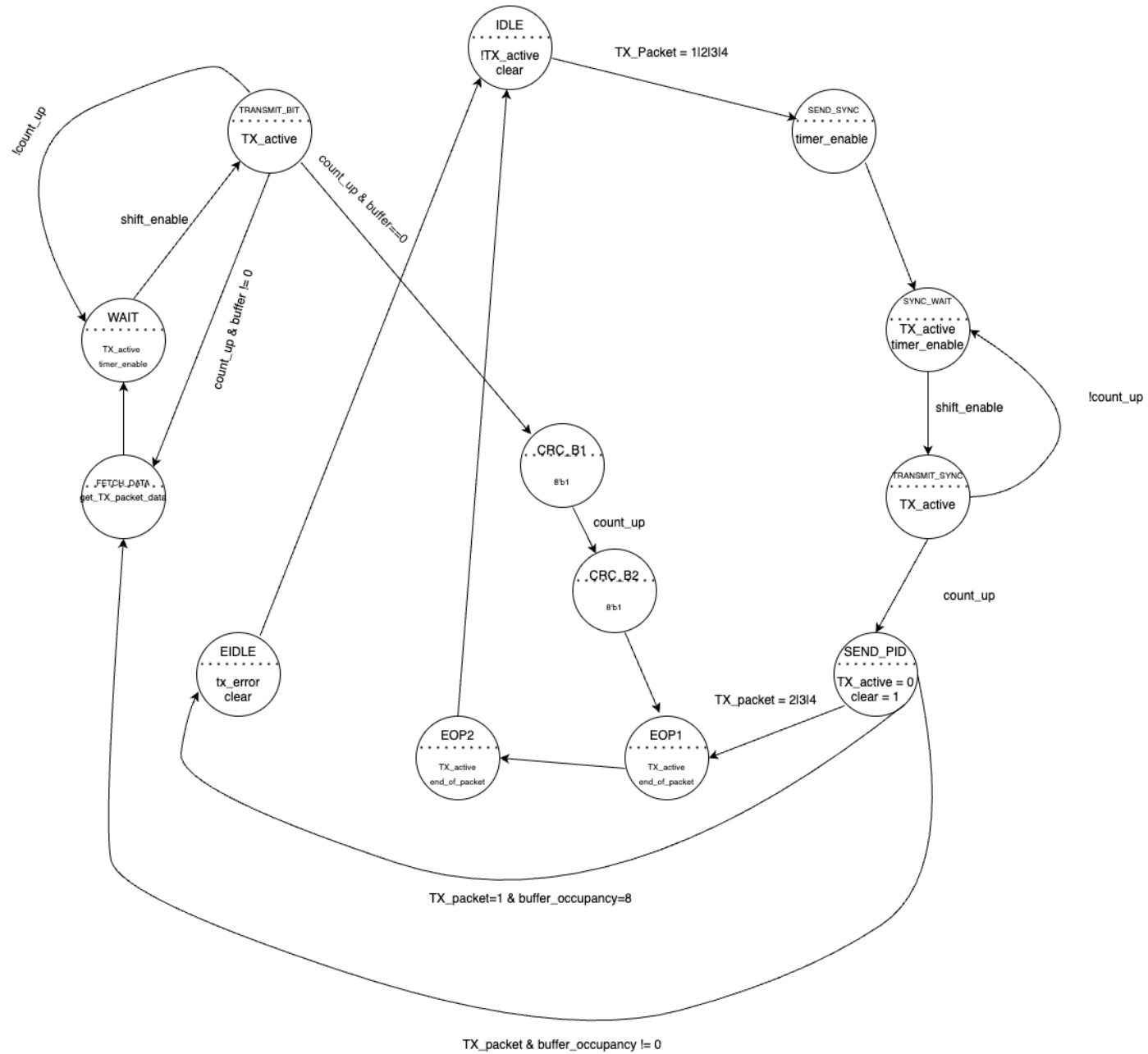


TRANSMITTER

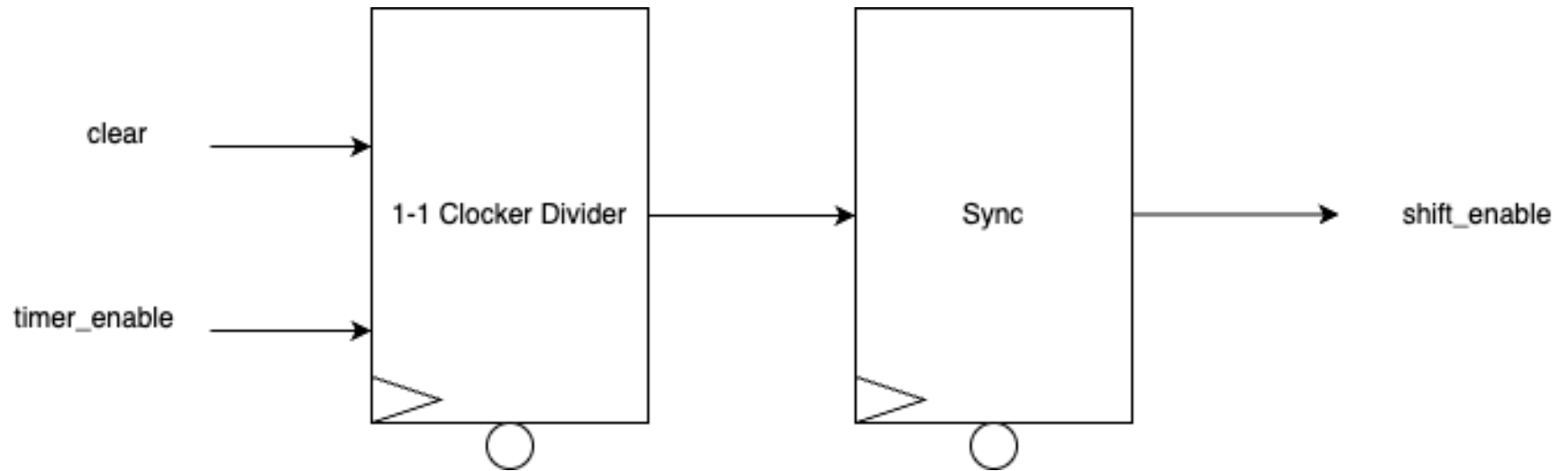
TOP LEVEL



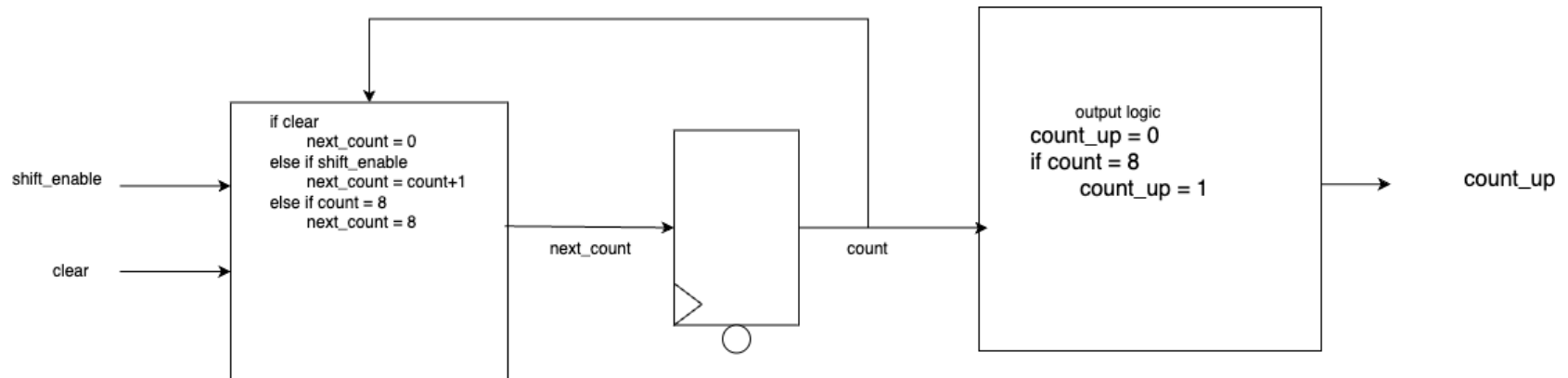
FSM



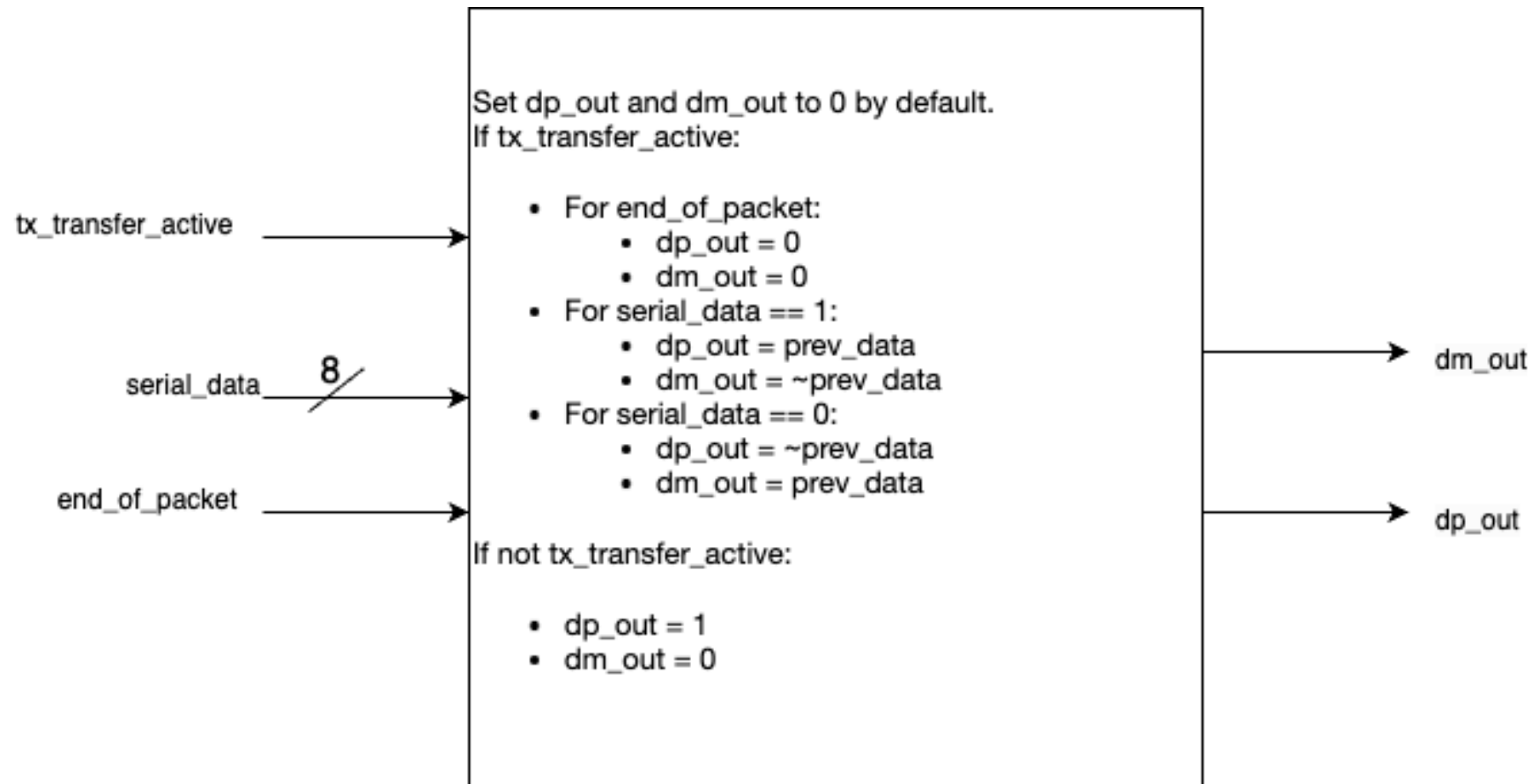
TIMER



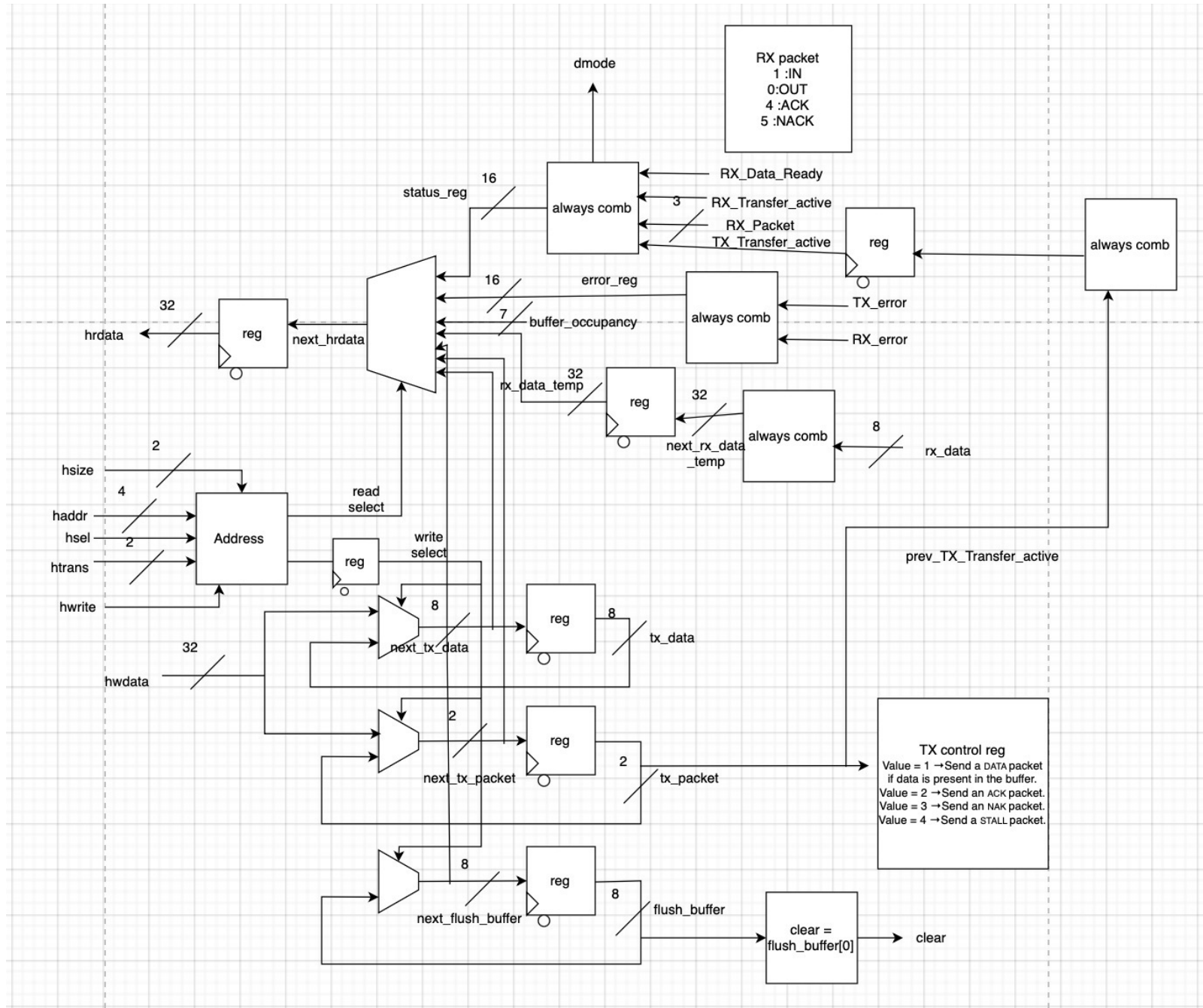
COUNTER



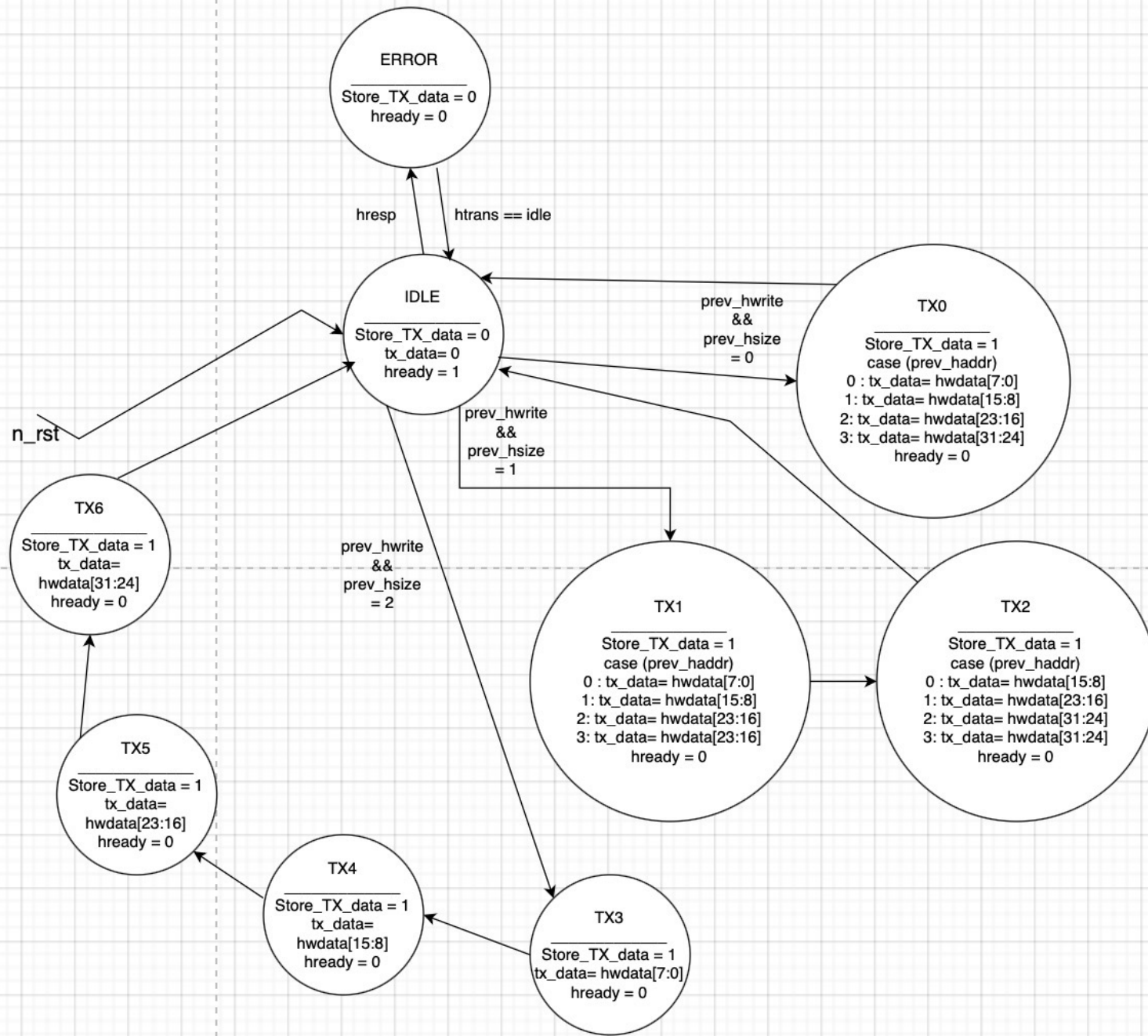
ENCODER



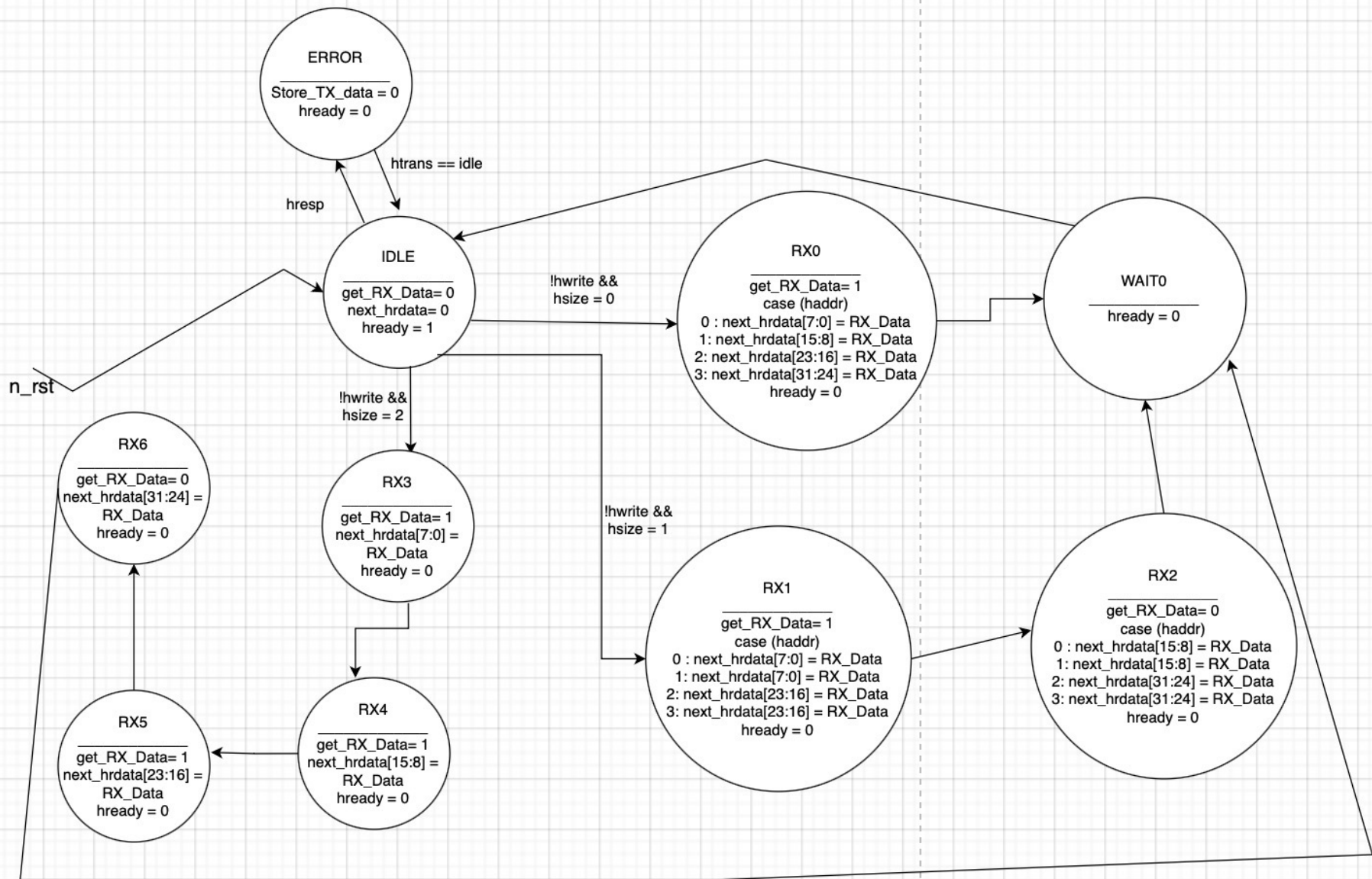
AHB SATELLITE



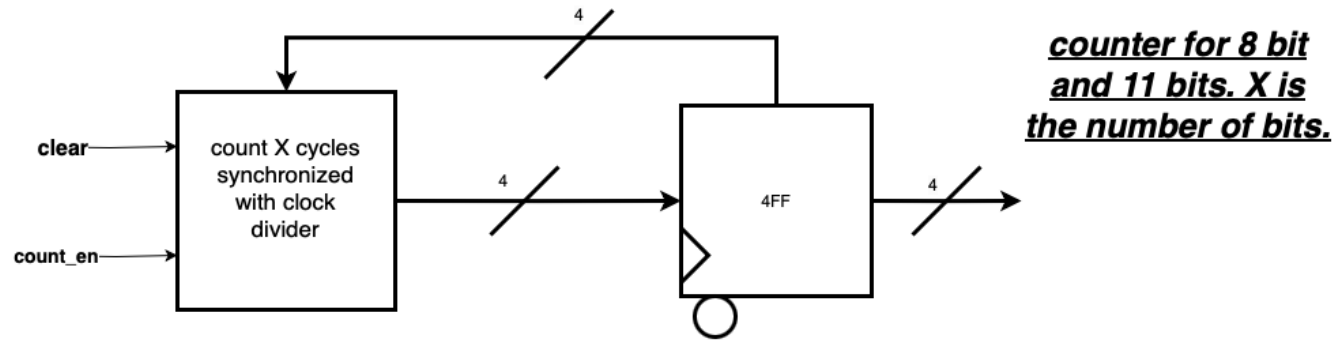
FSM_TX_Data



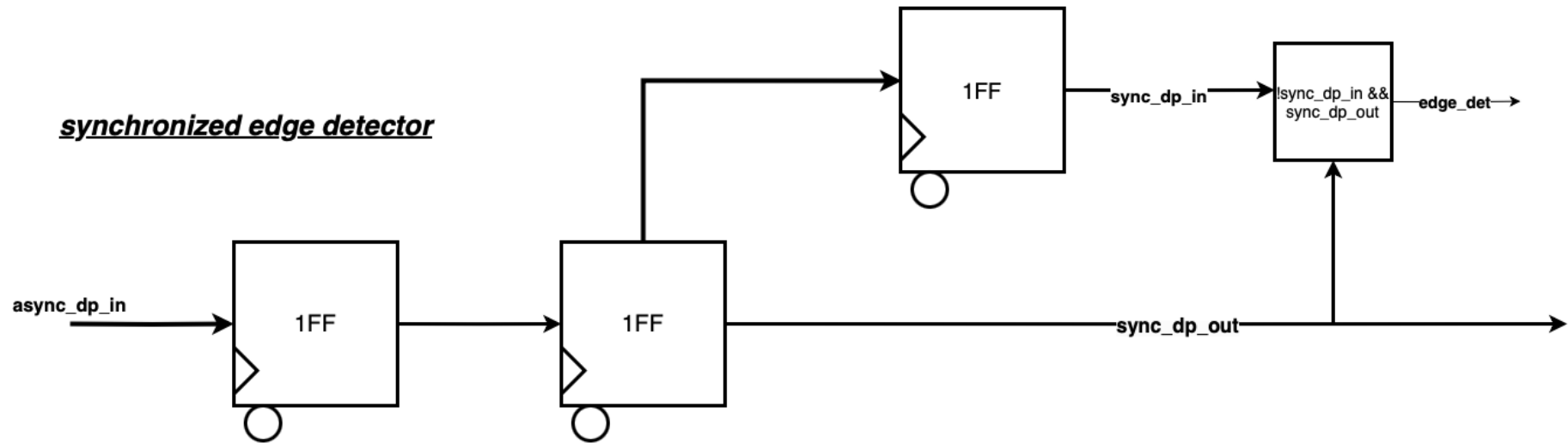
FSM_RX_Data

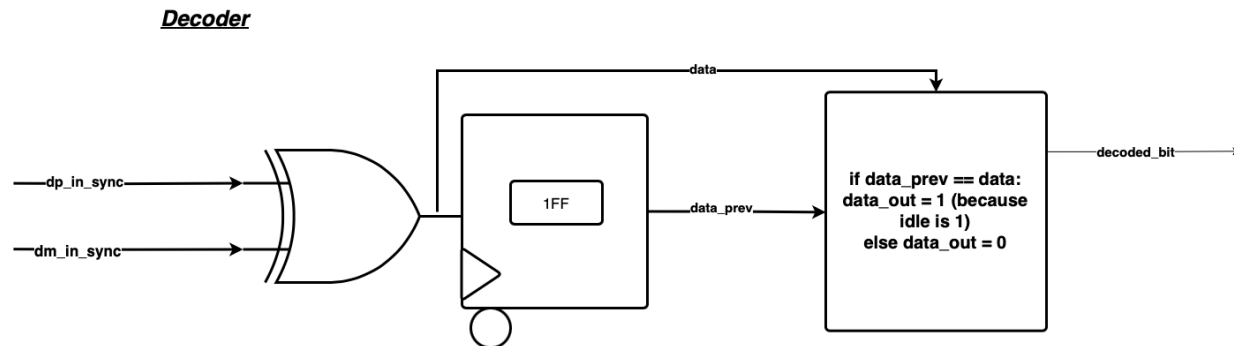
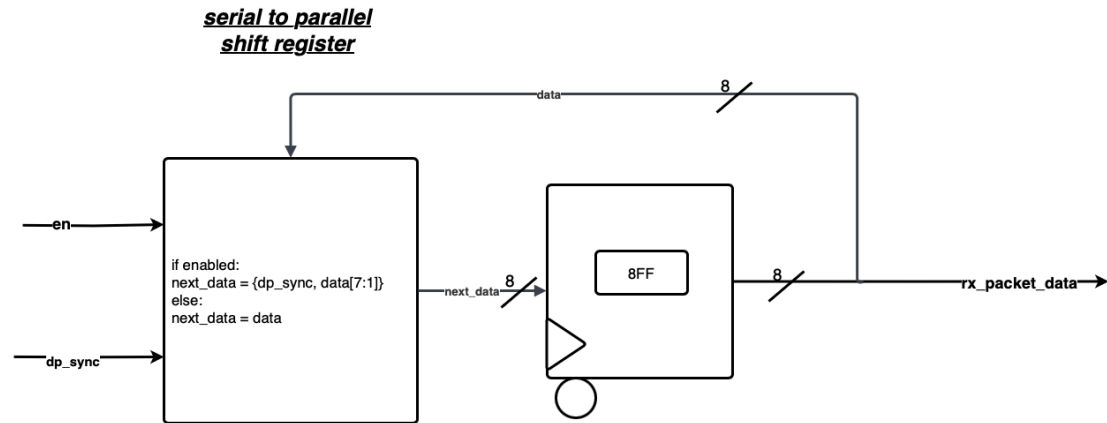


RECIEVER



synchronized edge detector

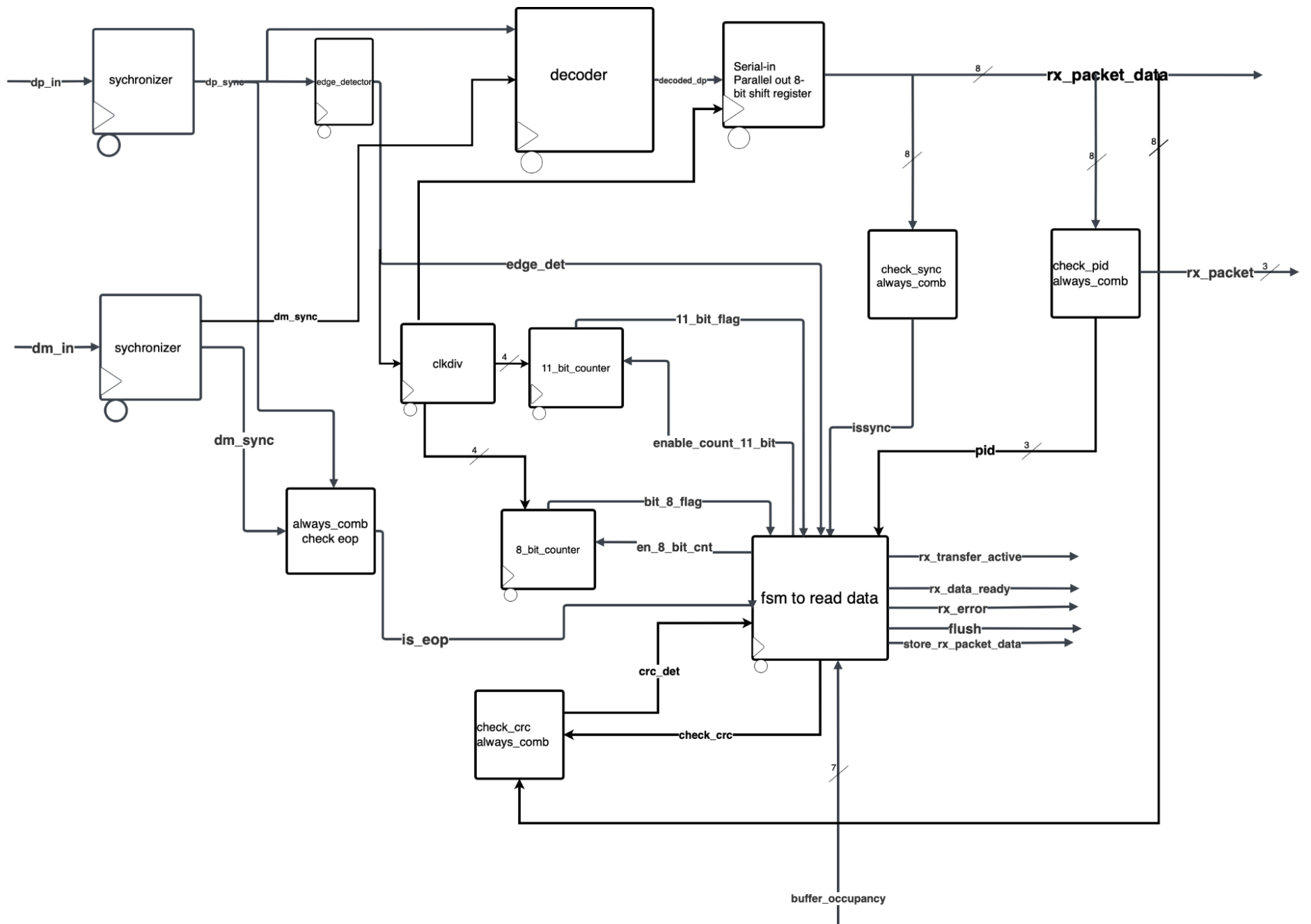


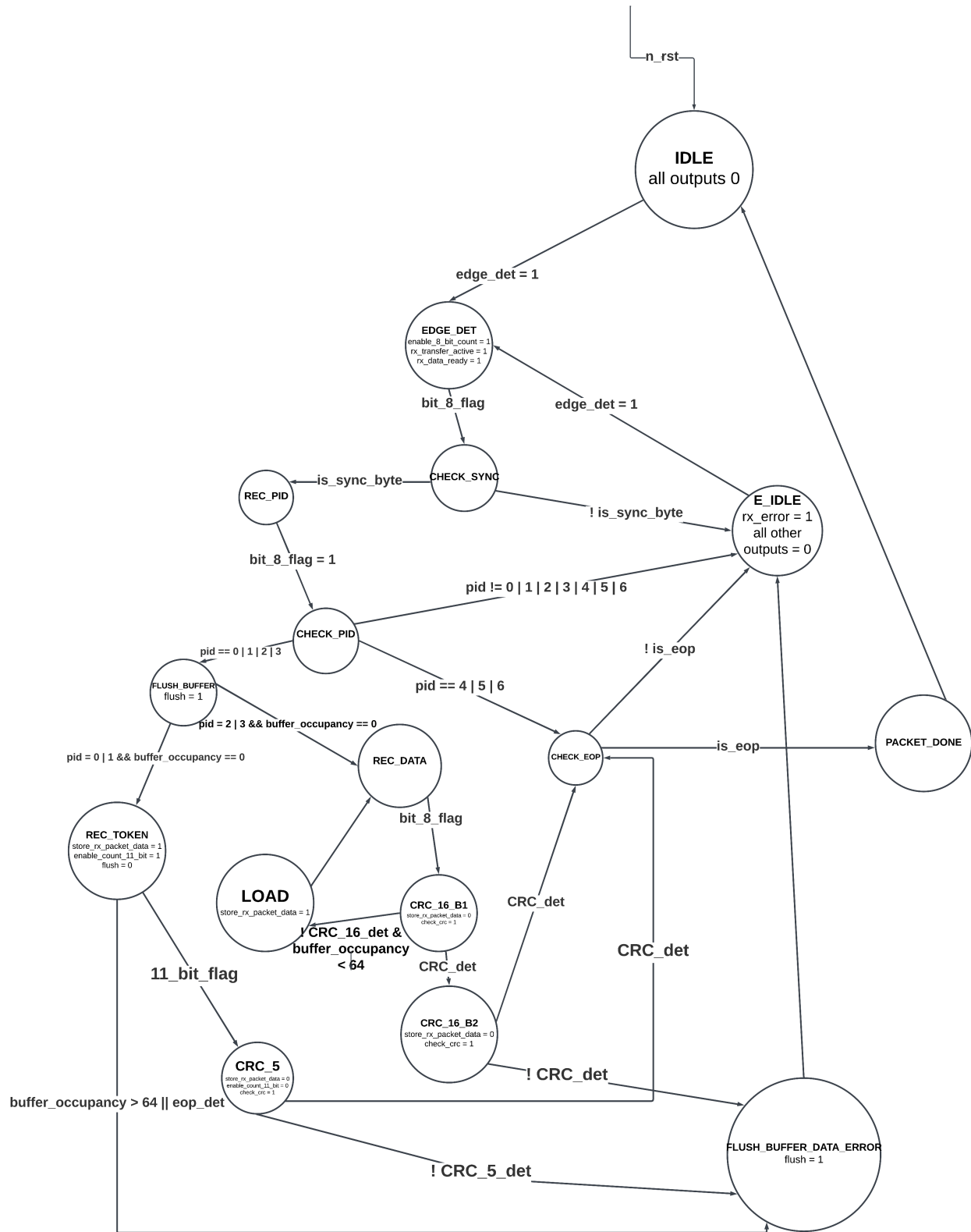


**pid byte with its
decoded string
and mapped
rx_packet value**

packet type	decoded	rx_packet
OUT: 4'b0001	10000111 (0x87)	0
IN: 4'b1001	10010110 (0x96)	1
DATA0: 4'b0011	11000011 (0xC3)	2
DATA1: 4'b1011	11010010 (0xD2)	3
ACK: 4'b0010	01001011 (0x4B)	4
NAK 4'b1010	01011010 (0x5A)	5
STALL: 4'b1110	01111000 (0x78)	6

1. all CRC bits are set to 1
2. eop detect is NOR(dp_in dm_in)
3. sync_byte = 8'b00000001





TOP LEVEL

