

Curr St.	MSB		LSB		int. Val.	Next St.	MSB		LSB		Int. Val.
	Loop	Emt	GBE	emt.			Loop	RD	GBE	RD	
00	1	1	1	0	6	00	0	0	0	0	0
00	1	1	1	1	7	00	0	0	0	0	0
00	0	1	1	0	2	01	0	0	0	0	0
00	0	1	1	1	3	01	0	0	0	0	0
00	1	0	0	0	4	10	0	0	0	0	0
00	1	0	1	1	5	10	0	0	0	0	0
00	0	0	0	0	0	01	0	0	0	0	0
00	0	0	1	1	1	01	0	0	0	0	0
01	0	1	0	0	2	01	1	0	0	2	2
01	0	1	1	1	3	00	1	0	0	2	2
01	0	0	0	0	0	01	1	0	0	2	2
01	0	0	1	1	1	00	1	0	0	2	2
01	1	0	0	0	4	01	1	0	0	2	2
01	1	0	1	1	5	00	1	0	0	2	2
01	1	1	0	0	6	01	1	0	0	2	2
01	1	1	1	1	7	00	1	0	0	2	2
10	0	0	0	0	0	10	0	1	1	1	1
10	0	0	1	1	1	00	0	1	1	1	1
10	1	0	0	0	4	10	0	1	1	1	1
10	1	0	1	1	5	00	0	1	1	1	1
10	0	1	0	2	2	10	0	1	1	1	1
10	0	1	1	3	3	00	0	1	1	1	1
10	1	1	0	6	6	10	0	1	1	1	1
10	1	1	1	7	7	00	0	1	1	1	1

States: 00= Decide
 01= Loop RD
 10= GBE RD

Comments

In the actual implementation on ROACH, we or the gbe and loop eof to be the LSB. This is because when we are reading from some fifo (loop or gbe) then the next eof will be from that respective fifo.