

Kill-switch

Presentation

Motivation

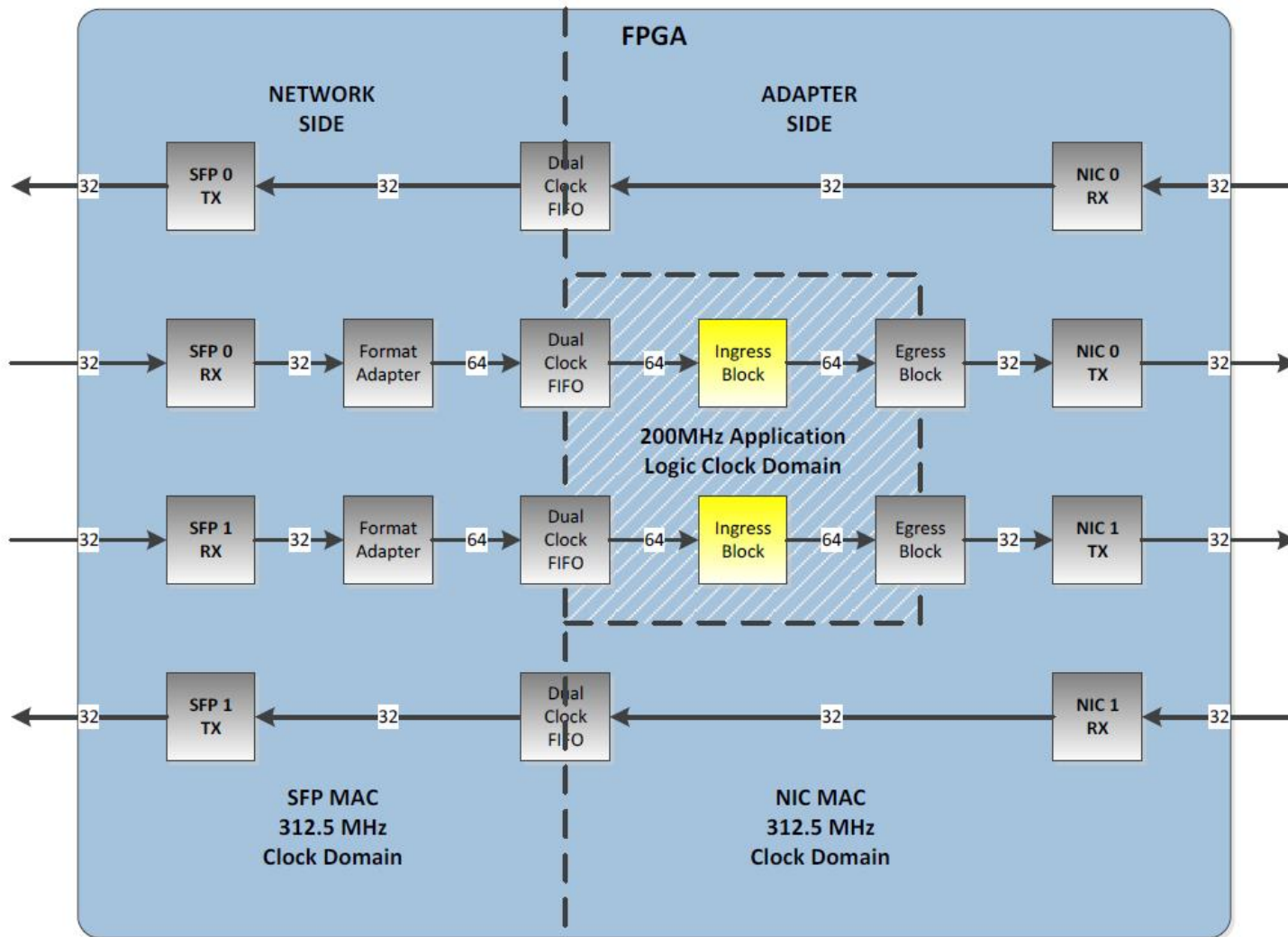
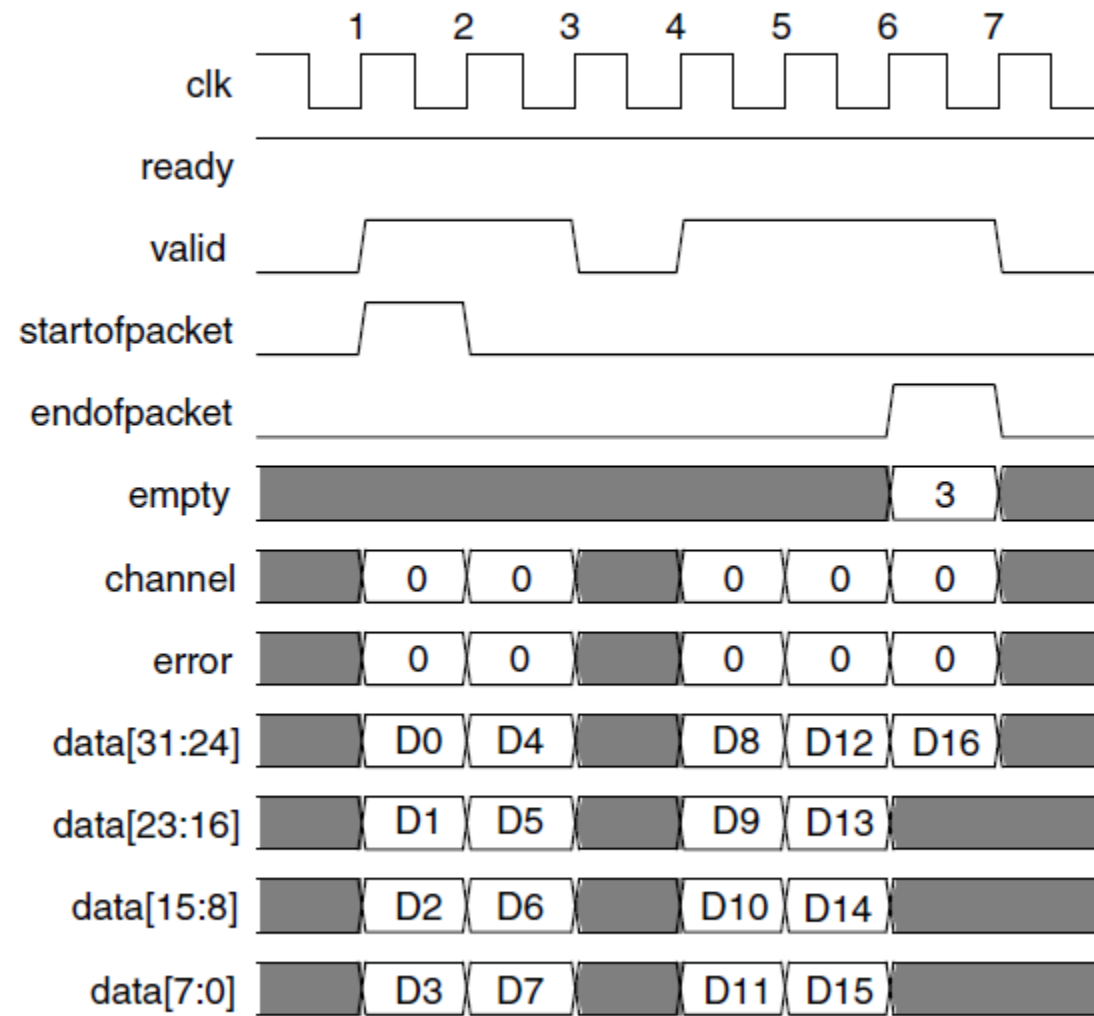
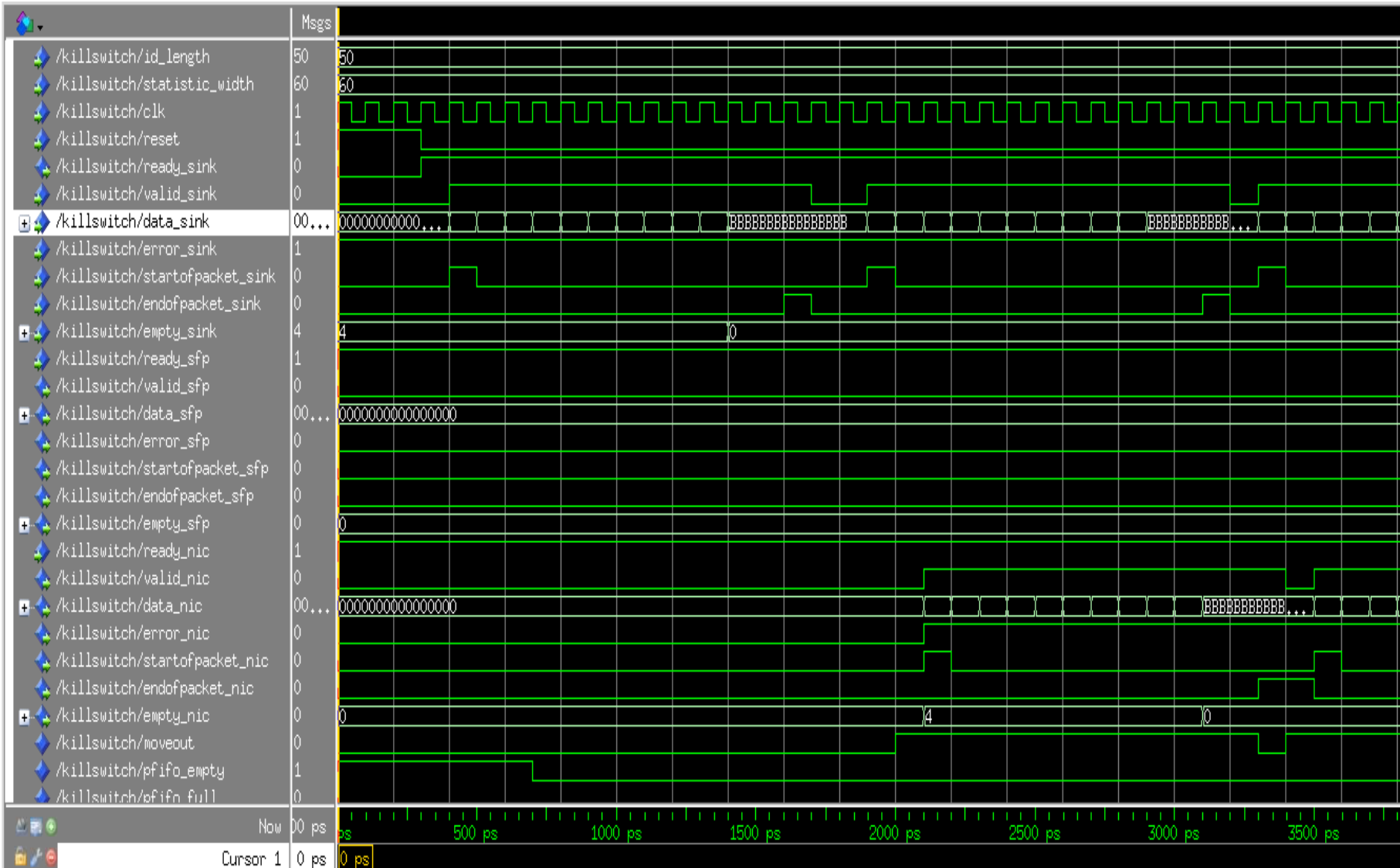


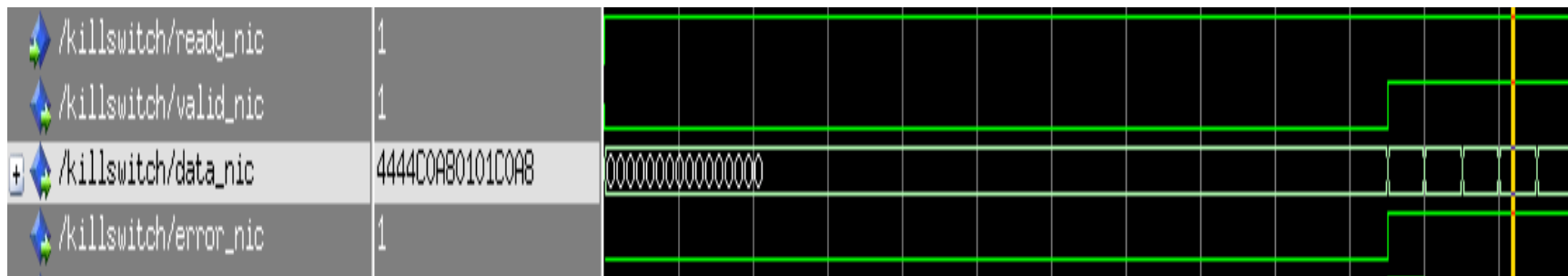
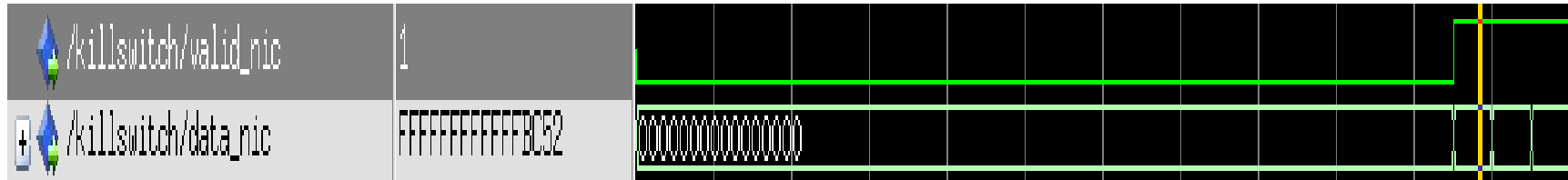
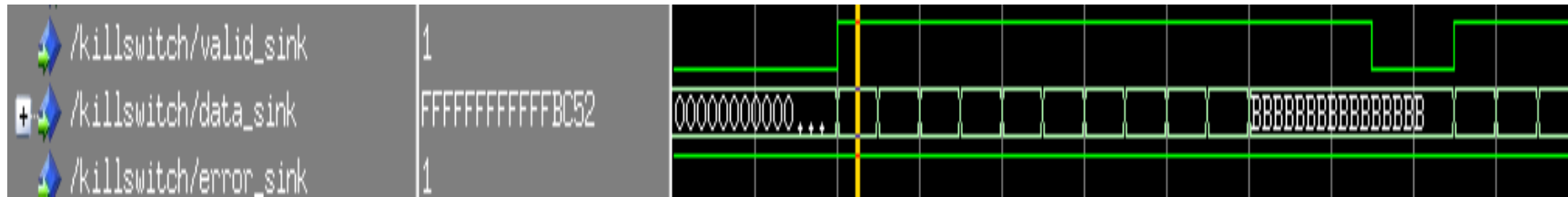
Figure 15 Ingress Example Design

Figure 5–11. Packet Transfer

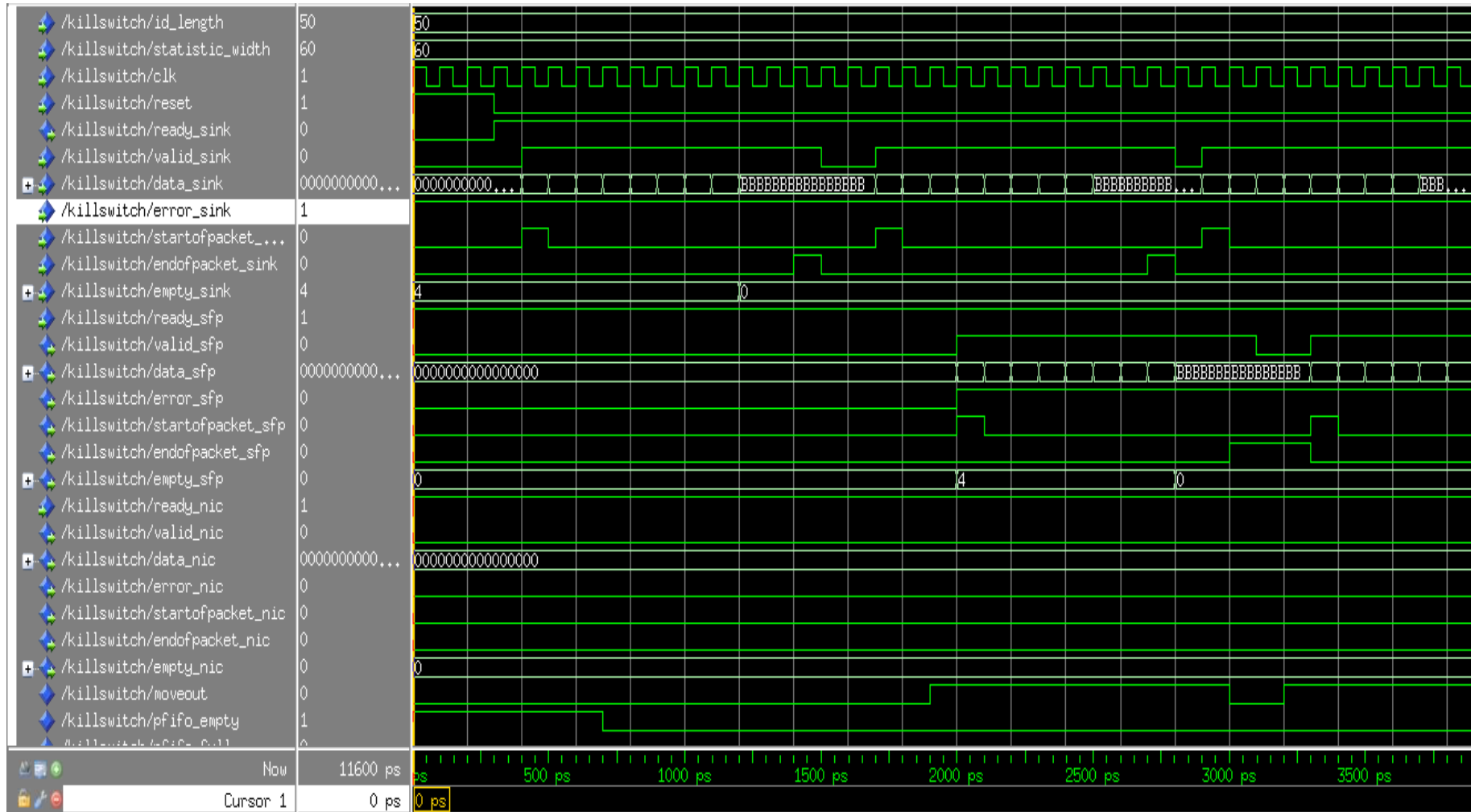





Part1.Simulation on Modelsim scenario 1












Scenario 2

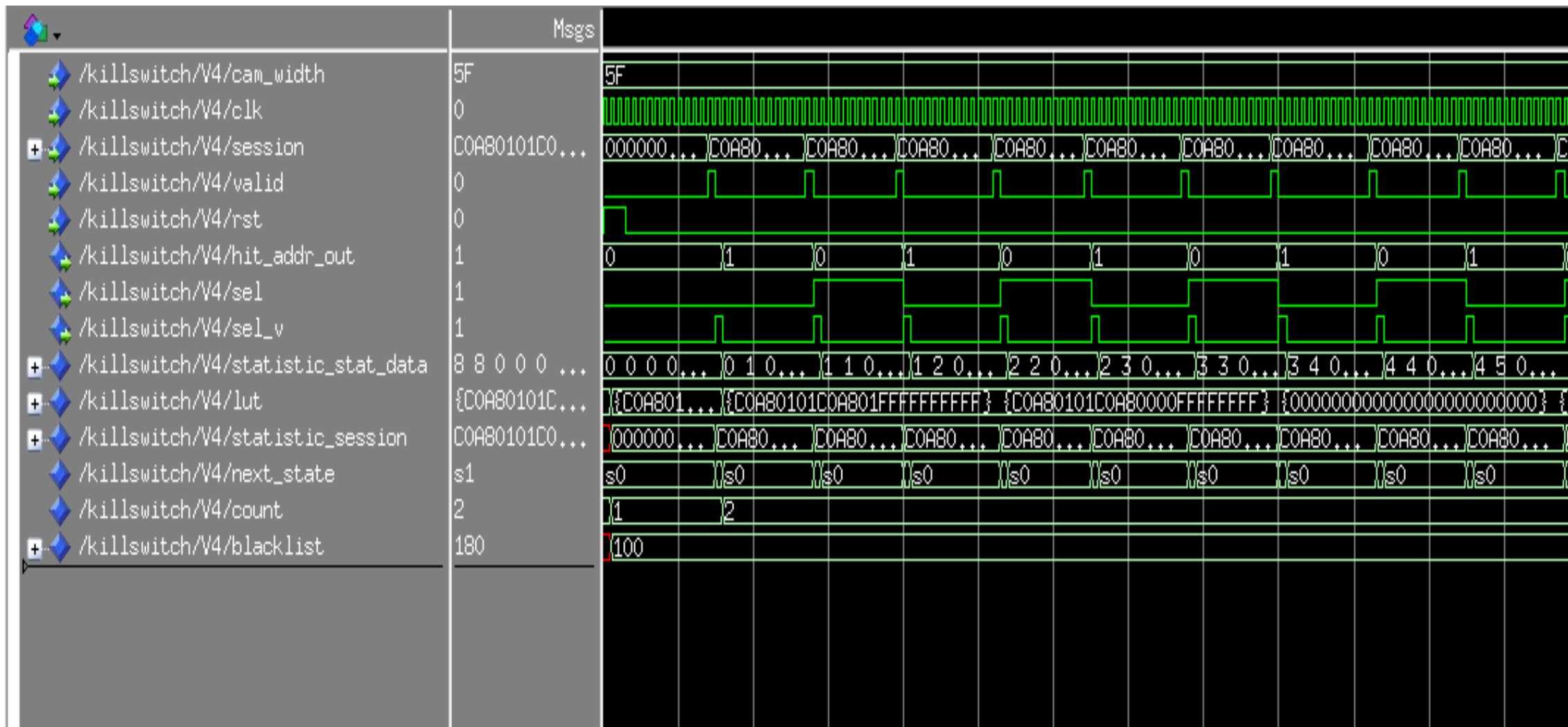


 /killswitch/valid_sink	1	
 /killswitch/data_sink	FFFFFFFFFFFFFFBC52	0000000000...
 /killswitch/error_sink	1	

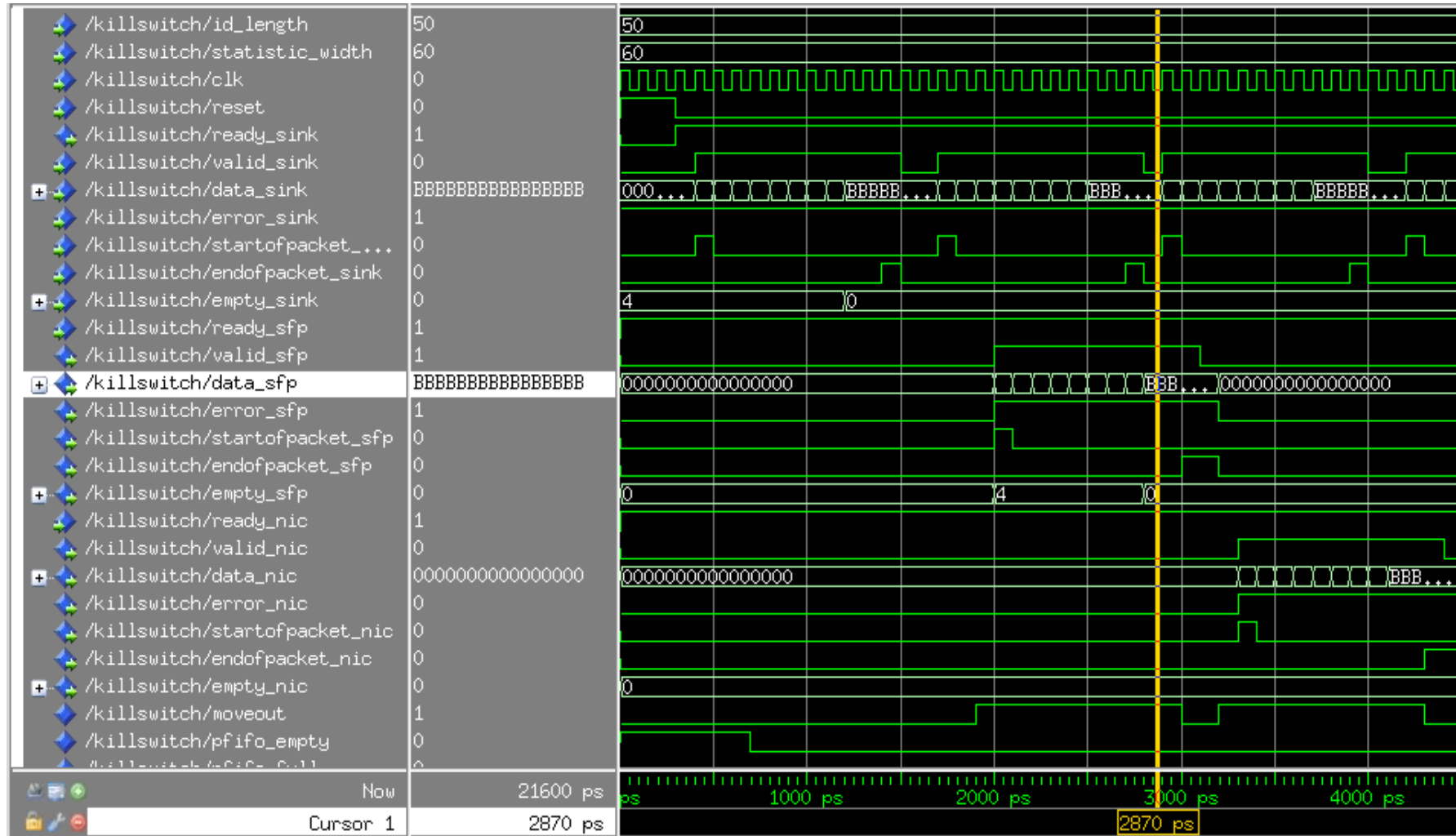
 /killswitch/valid_sfp	1	
 /killswitch/data_sfp	FFFFFFFFFFFFFFBC52	0000000000000000
 /killswitch/error_sfp	1	

 /killswitch/ready_sink	1	
 /killswitch/valid_sink	1	
 /killswitch/data_sink	0000FFFFFFFF5555	0000000000... 0B
 /killswitch/error_sink	1	

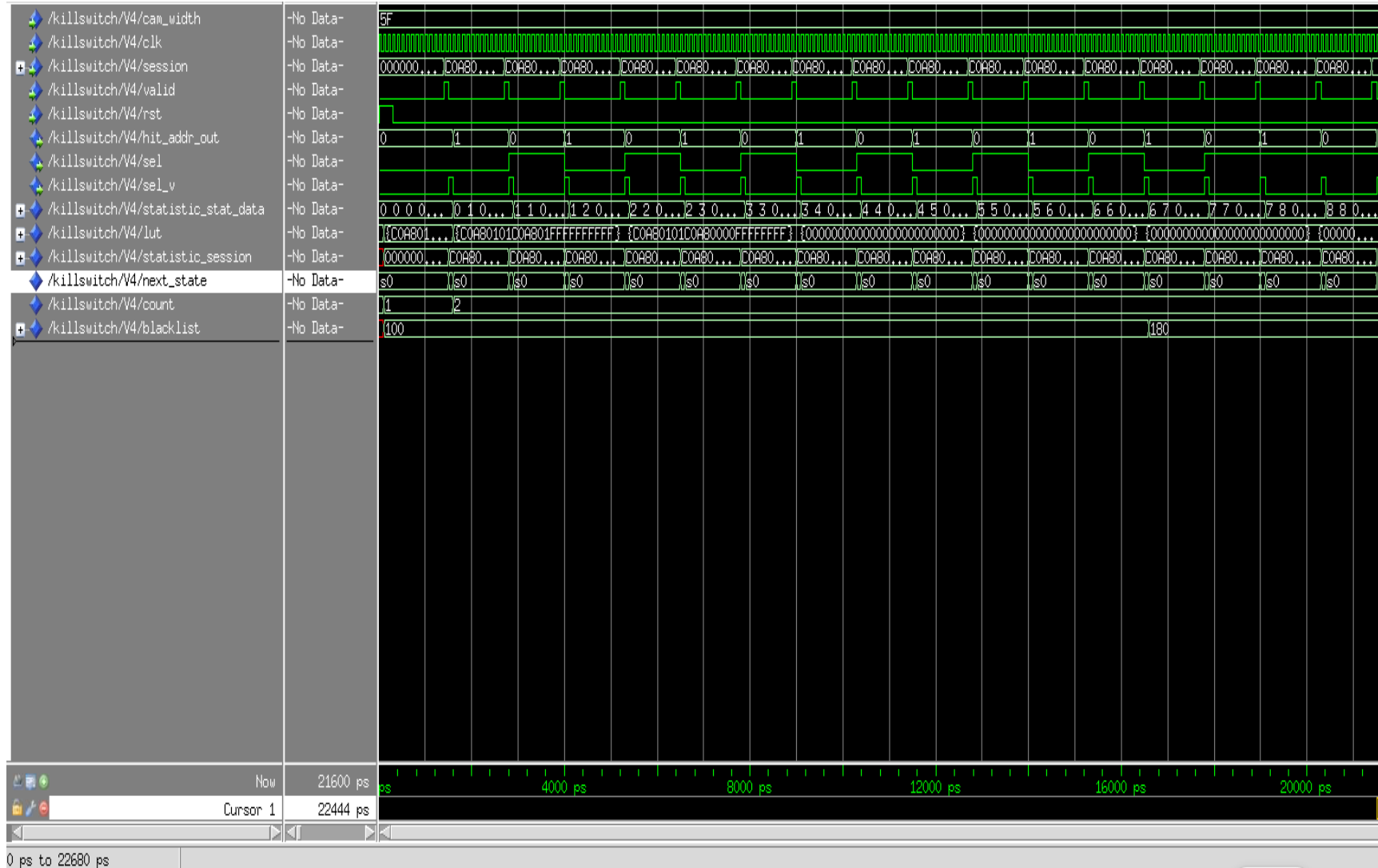
 /killswitch/ready_sfp	1	
 /killswitch/valid_sfp	1	
 /killswitch/data_sfp	0000FFFFFFFF5555	0000000000000000
 /killswitch/error_sfp	1	

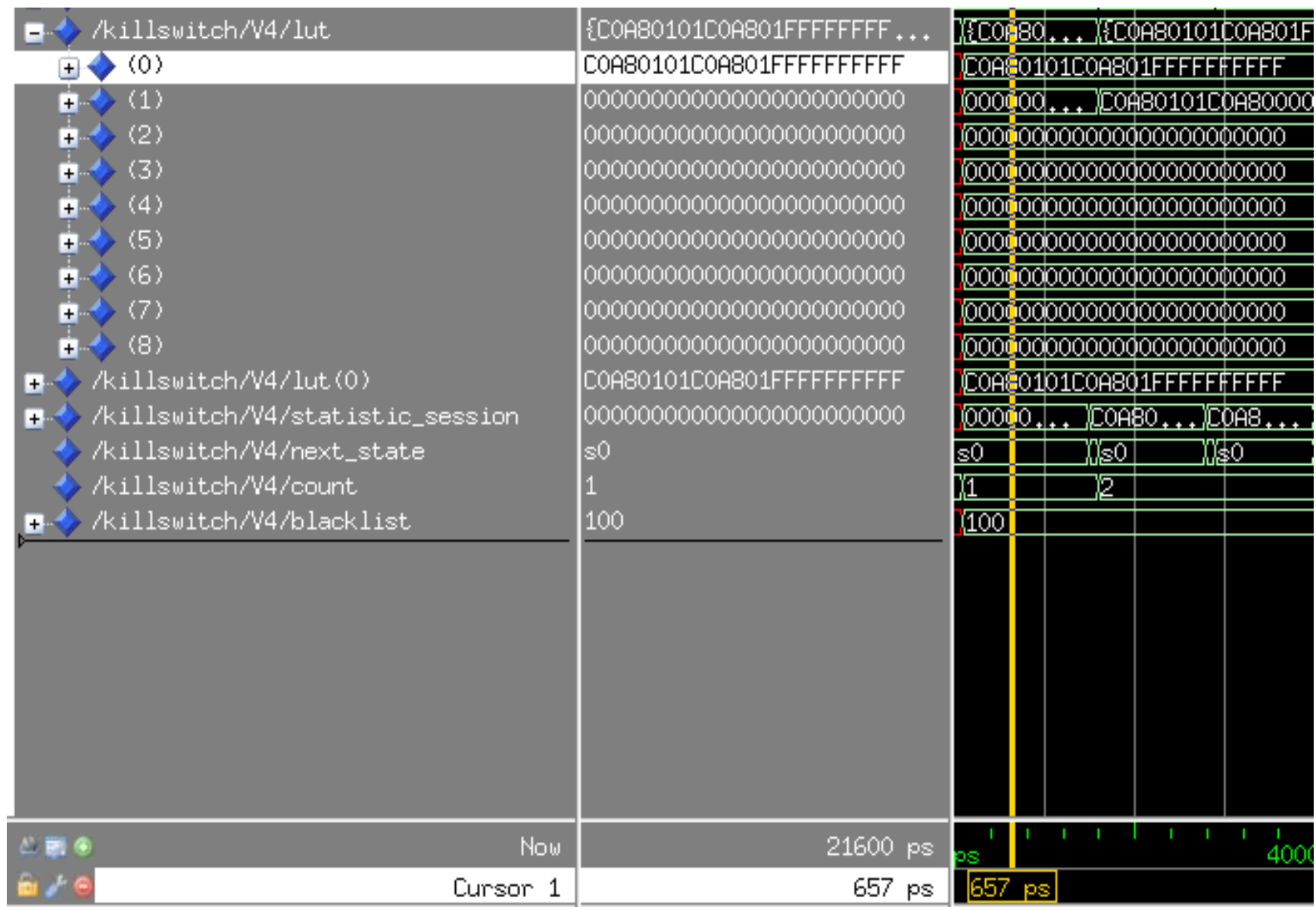


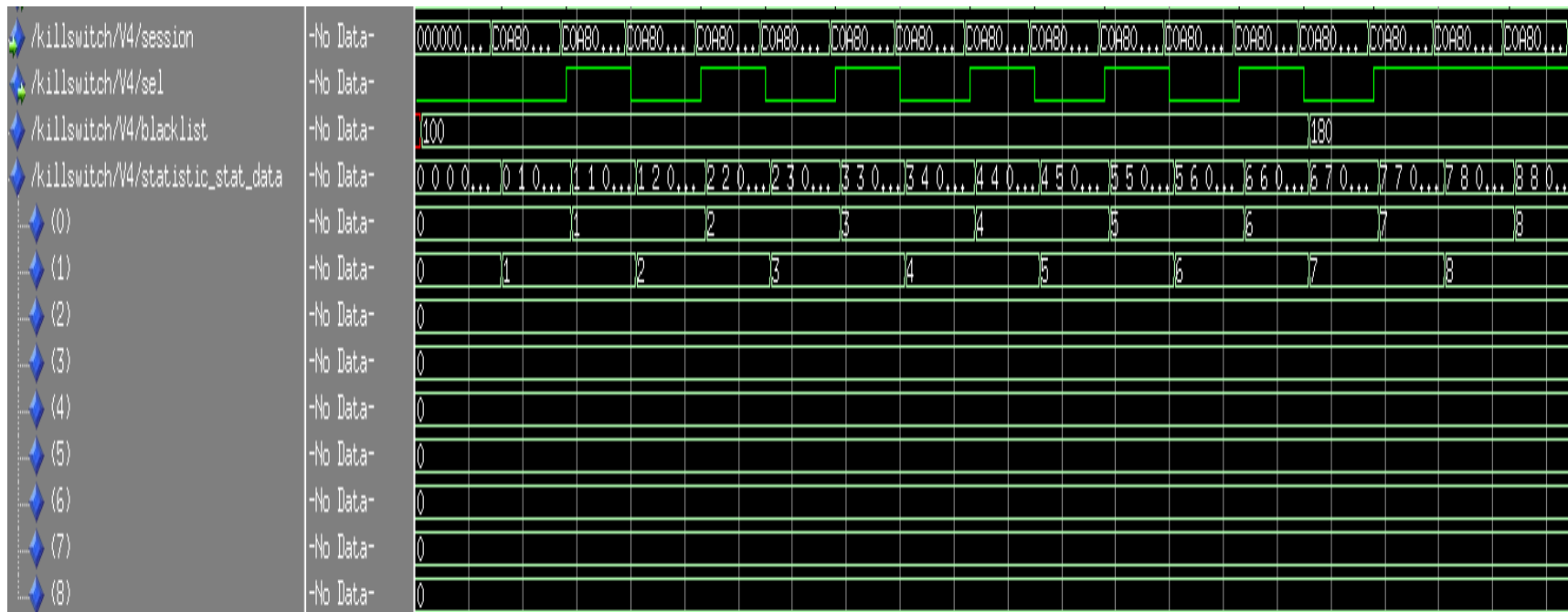
Scenario 3



Scenario 4







Part2: simulation on wireshark

No.	Time .	Source	Destination	Protocol	Info
1	0.000000	192.168.1.10	192.168.1.111	TCP	65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
2	1.000009	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
3	2.000006	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
4	3.000005	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
5	4.000012	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
6	4.999977	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
7	6.000018	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
8	7.000015	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
9	8.000017	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
10	9.000020	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
11	10.000024	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
12	10.003219	192.168.1.10	192.168.1.222	TCP	65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
13	10.003227	192.168.1.10	192.168.1.222	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
14	10.003229	192.168.1.10	192.168.1.222	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
15	10.003231	192.168.1.10	192.168.1.222	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
16	10.003233	192.168.1.10	192.168.1.222	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
17	10.003235	192.168.1.10	192.168.1.222	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
18	10.003237	192.168.1.10	192.168.1.222	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
19	11.000025	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
20	12.000028	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
21	13.000029	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
22	14.000027	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
23	15.000031	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15
24	16.000034	192.168.1.10	192.168.1.111	TCP	[TCP Port numbers reused] 65535 > 65535 [SYN, RST, PSH, URG] Seq=0 Win=13358 Urg=14653 Len=15

▶ Frame 7 (69 bytes on wire, 69 bytes captured)
▶ Ethernet II, Src: WwPcbaTe_7b:1b:67 (00:0f:1f:7b:1b:67), Dst: IPv4mcast_50:50:01 (01:00:5e:50:50:01)
▶ Internet Protocol, Src: 192.168.1.10 (192.168.1.10), Dst: 192.168.1.111 (192.168.1.111)
▶ Transmission Control Protocol, Src Port: 65535 (65535), Dst Port: 65535 (65535), Seq: 0, Len: 15

```
0000 01 00 5e 50 50 01 00 0f 1f 7b 1b 67 08 00 45 00  ..^PP... .{.g..E.  
0010 00 5f 00 00 40 00 10 06 e6 cf c0 a8 01 0a c0 a8  ._.@... ..  
0020 01 6f ff ff ff ff 00 0c 24 84 38 3d 46 49 58 2e  .o..... $.8=FIX.  
0030 34 2e 32 7c 39 3d 31 37 38 d7 62 59 a4 2f 75 8c  4.2|9=17 8.by./u.  
0040 fa 6e 7a d6 06  .nz..
```