

## 1. Waveform Task 1:

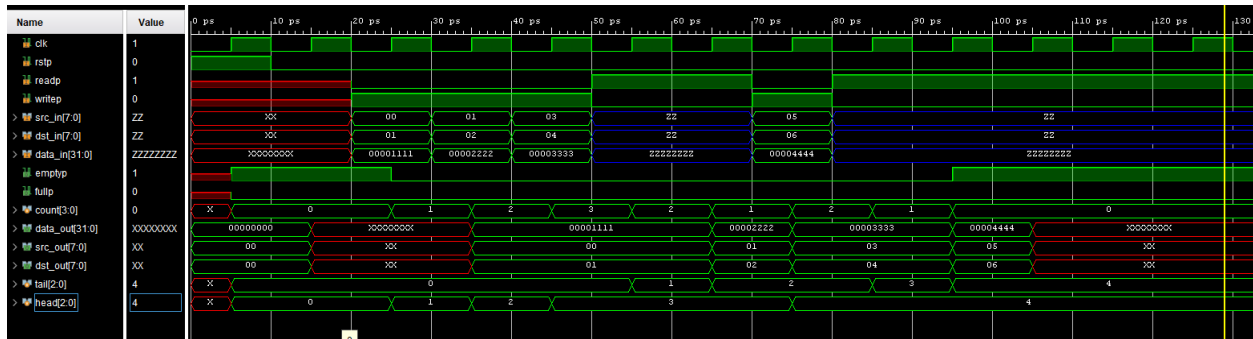


Figure 1. Từ 0ps->10ps: reset; 20ps->50ps ghi 3 lần; 50ps->70ps: đọc 2 lần; 70ps->80ps: ghi 1 lần; 80ps->140ps: đọc 6 lần.

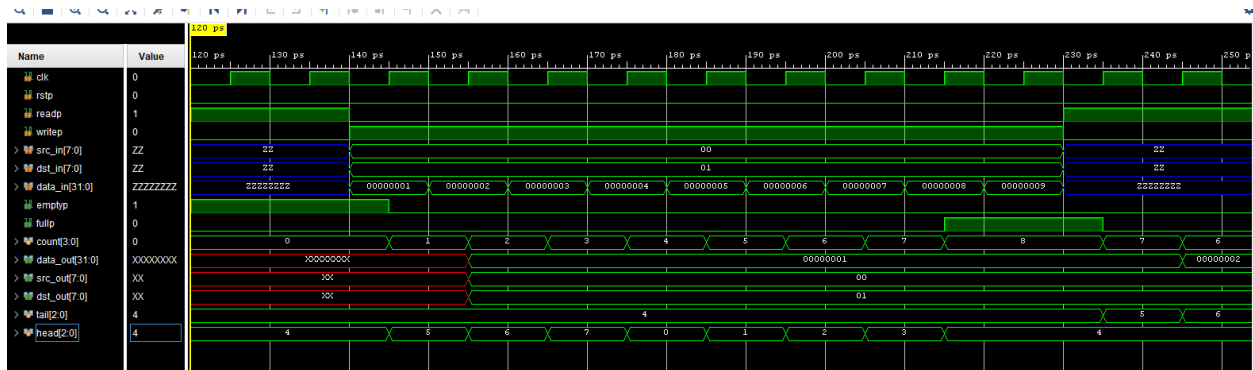


Figure 2. Từ 80ps->140ps: đọc 6 lần; 140ps->230ps: ghi 9 lần;

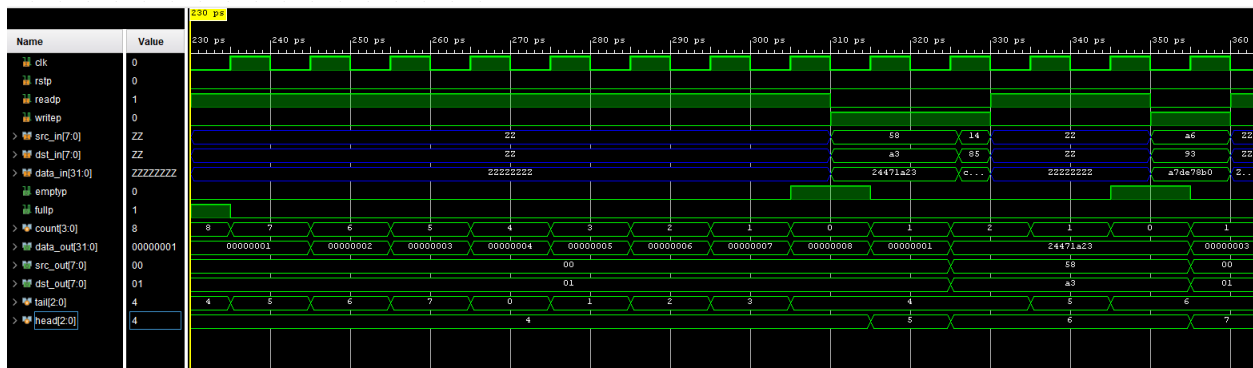


Figure 3. Từ 230ps->310ps: đọc 8 lần; Done TEST1.

## 2. Display Fail Test1:

```
INFO: [USF-XSim-69] 'elaborate' step finished in '3' seconds
Time resolution is 1 ps
FAILURE: Underflow Detected at time T=106!. Exiting test.
FAILURE: Underflow Detected at time T=116!. Exiting test.
FAILURE: Underflow Detected at time T=126!. Exiting test.
FAILURE: Underflow Detected at time T=136!. Exiting test.
FAILURE: Overflow Detected at time T=226!. Exiting test.
Done TEST1.
READER is waiting..
READER is waiting..
```

### 3. Waveform của Test 2:

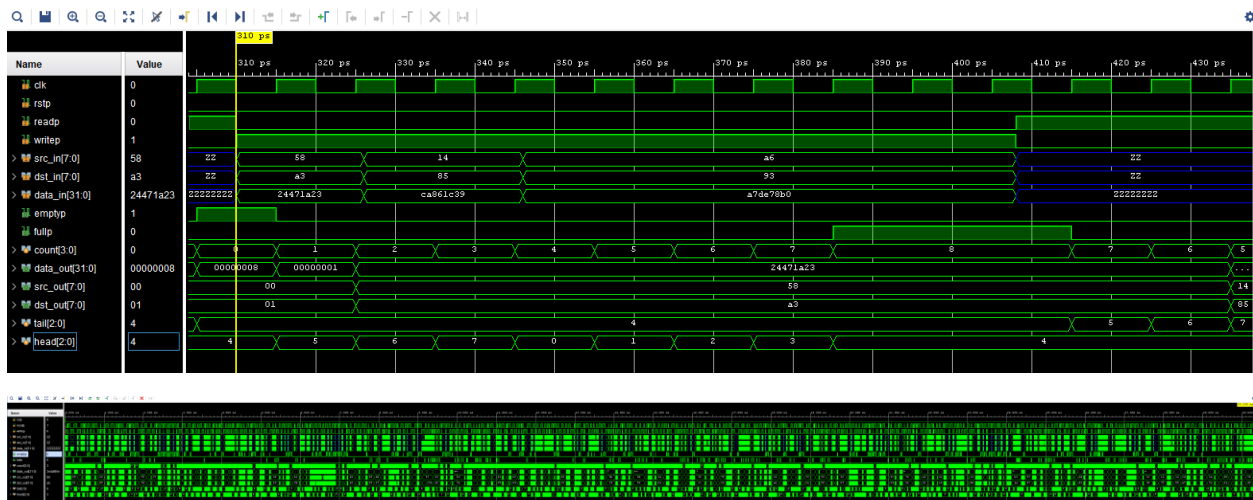


Figure 4.. Test 2 từ 310ps->30.298ps.

#### 4. Display Task 2:

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FAILURE: Empty flag missed at time T=27216. Exiting test.

FAILURE: Underflow Detected at time T=27226!. Exiting test.

FAILURE: Underflow Detected at time T=27236!. Exiting test.

FAILURE: Underflow Detected at time T=27246!. Exiting test.

FAILURE: Underflow Detected at time T=27256!. Exiting test.

READER is waiting..

FAILURE: Underflow Detected at time T=27306!. Exiting test.

FAILURE: Underflow Detected at time T=27316!. Exiting test.

FAILURE: Underflow Detected at time T=27326!. Exiting test.

FAILURE: Underflow Detected at time T=27336!. Exiting test.

READER is waiting..

FAILURE: Underflow Detected at time T=27346!. Exiting test.

FAILURE: Underflow Detected at time T=27356!. Exiting test.

READER is waiting..

FAILURE: Full flag missed at time T=27536. Exiting test.

FAILURE: Overflow Detected at time T=27586!. Exiting test.

FAILURE: Overflow Detected at time T=27596!. Exiting test.

FAILURE: Overflow Detected at time T=27606!. Exiting test.

FAILURE: Overflow Detected at time T=27676!. Exiting test.

FAILURE: Underflow Detected at time T=27786!. Exiting test.

FAILURE: Underflow Detected at time T=27796!. Exiting test.

FAILURE: Underflow Detected at time T=27806!. Exiting test.

FAILURE: Underflow Detected at time T=27816!. Exiting test.

FAILURE: Underflow Detected at time T=27826!. Exiting test.

FAILURE: Underflow Detected at time T=27836!. Exiting test.

FAILURE: Underflow Detected at time T=27846!. Exiting test.

READER is waiting..

FAILURE: Overflow Detected at time T=27976!. Exiting test.

FAILURE: Overflow Detected at time T=27986!. Exiting test.

FAILURE: Overflow Detected at time T=28016!. Exiting test.

FAILURE: Overflow Detected at time T=28066!. Exiting test.

FAILURE: Full flag missed at time T=28226. Exiting test.

FAILURE: Full flag missed at time T=28306. Exiting test.

FAILURE: Overflow Detected at time T=28316!. Exiting test.

FAILURE: Full flag missed at time T=28316. Exiting test.

FAILURE: Overflow Detected at time T=28326!. Exiting test.

FAILURE: Overflow Detected at time T=28336!. Exiting test.

FAILURE: Overflow Detected at time T=28346!. Exiting test.

FAILURE: Overflow Detected at time T=28376!. Exiting test.

FAILURE: Overflow Detected at time T=28386!. Exiting test.

FAILURE: Overflow Detected at time T=28396!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=28406!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=28416!. Exiting test.

FAILURE: Overflow Detected at time T=28426!. Exiting test.

FAILURE: Overflow Detected at time T=28496!. Exiting test.

FAILURE: Overflow Detected at time T=28506!. Exiting test.

FAILURE: Overflow Detected at time T=28516!. Exiting test.

FAILURE: Overflow Detected at time T=28526!. Exiting test.

FAILURE: Overflow Detected at time T=28536!. Exiting test.

READER is waiting..

FAILURE: Underflow Detected at time T=28646!. Exiting test.

FAILURE: Underflow Detected at time T=28656!. Exiting test.

FAILURE: Underflow Detected at time T=28766!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=28876!. Exiting test.

FAILURE: Overflow Detected at time T=28886!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=28896!. Exiting test.

FAILURE: Full flag missed at time T=29076. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=29126!. Exiting test.

FAILURE: Overflow Detected at time T=29136!. Exiting test.

FAILURE: Overflow Detected at time T=29146!. Exiting test.

FAILURE: Overflow Detected at time T=29156!. Exiting test.

FAILURE: Overflow Detected at time T=29166!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=29176!. Exiting test.

FAILURE: Overflow Detected at time T=29386!. Exiting test.

FAILURE: Overflow Detected at time T=29436!. Exiting test.

FAILURE: Overflow Detected at time T=29446!. Exiting test.

FAILURE: Overflow Detected at time T=29456!. Exiting test.

FAILURE: Overflow Detected at time T=29466!. Exiting test.

FAILURE: Overflow Detected at time T=29476!. Exiting test.

FAILURE: Overflow Detected at time T=29486!. Exiting test.

FAILURE: Overflow Detected at time T=29496!. Exiting test.

FAILURE: Overflow Detected at time T=29546!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=29556!. Exiting test.

FAILURE: Overflow Detected at time T=29566!. Exiting test.

FAILURE: Overflow Detected at time T=29576!. Exiting test.

FAILURE: Overflow Detected at time T=29586!. Exiting test.

FAILURE: Overflow Detected at time T=29716!. Exiting test.

FAILURE: Overflow Detected at time T=29746!. Exiting test.

FAILURE: Overflow Detected at time T=29756!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=29766!. Exiting test.

FAILURE: Overflow Detected at time T=29776!. Exiting test.

FAILURE: Overflow Detected at time T=29786!. Exiting test.

WRITER is waiting..

FAILURE: Overflow Detected at time T=29796!. Exiting test.

FAILURE: Overflow Detected at time T=29946!. Exiting test.

FAILURE: Overflow Detected at time T=30036!. Exiting test.

FAILURE: Overflow Detected at time T=30046!. Exiting test.

FAILURE: Overflow Detected at time T=30136!. Exiting test.

FAILURE: Overflow Detected at time T=30146!. Exiting test.

FAILURE: Overflow Detected at time T=30196!. Exiting test.

FAILURE: Overflow Detected at time T=30206!. Exiting test.

FAILURE: Overflow Detected at time T=30216!. Exiting test.

FAILURE: Overflow Detected at time T=30246!. Exiting test.

Done with WRITER fork..

finish called at time : 30298 ps : File "D:/Verification/LapFIFO/vivado\_project/fif

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