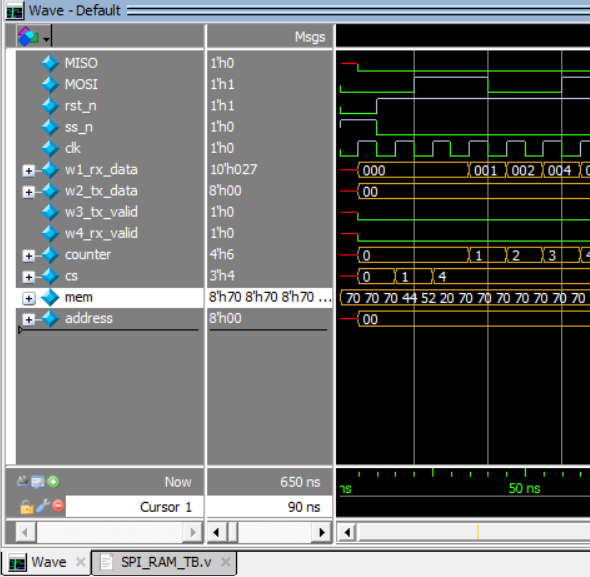


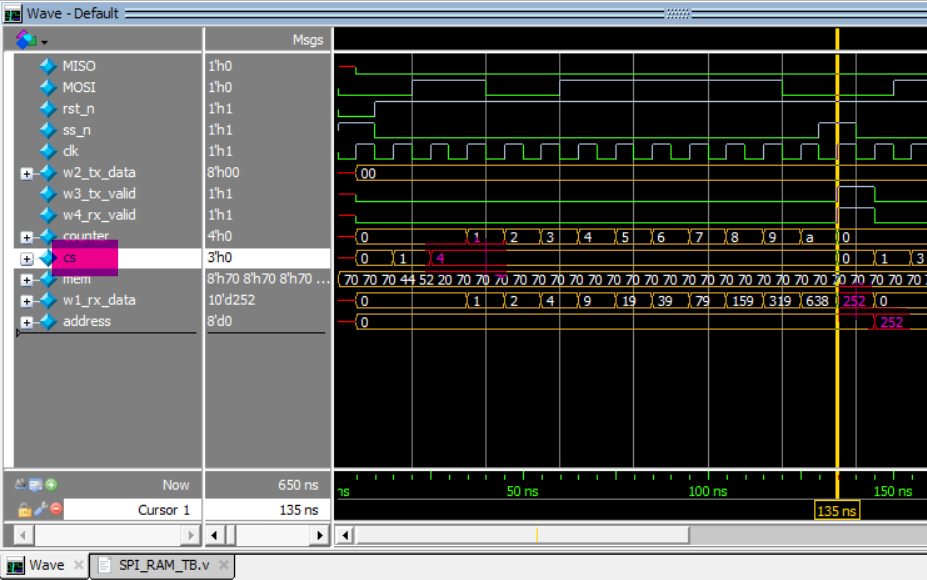
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | |
|  | | SPI slave with single port RAM | | | |  | |
|  |  | | | | | |  |
|  | | | Teammates:  Abdulrahman Mohammad Abdelrahman Ahmed Sayed | |  | | |
|  | | | Under Supervision of: Eng. Kareem Waseem |

**Snippets from the waveforms captured from QuestaSim**

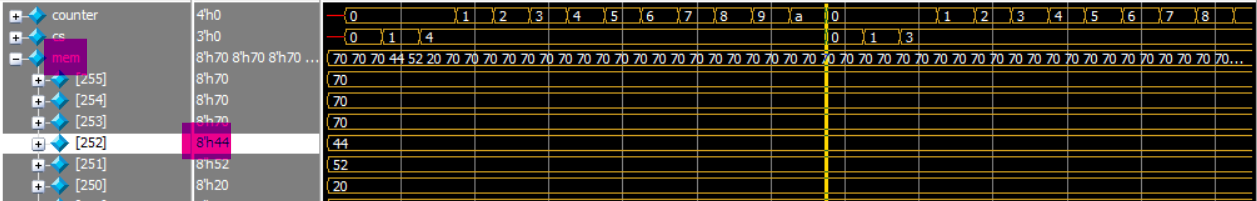
**1\_testing synchronous reset**



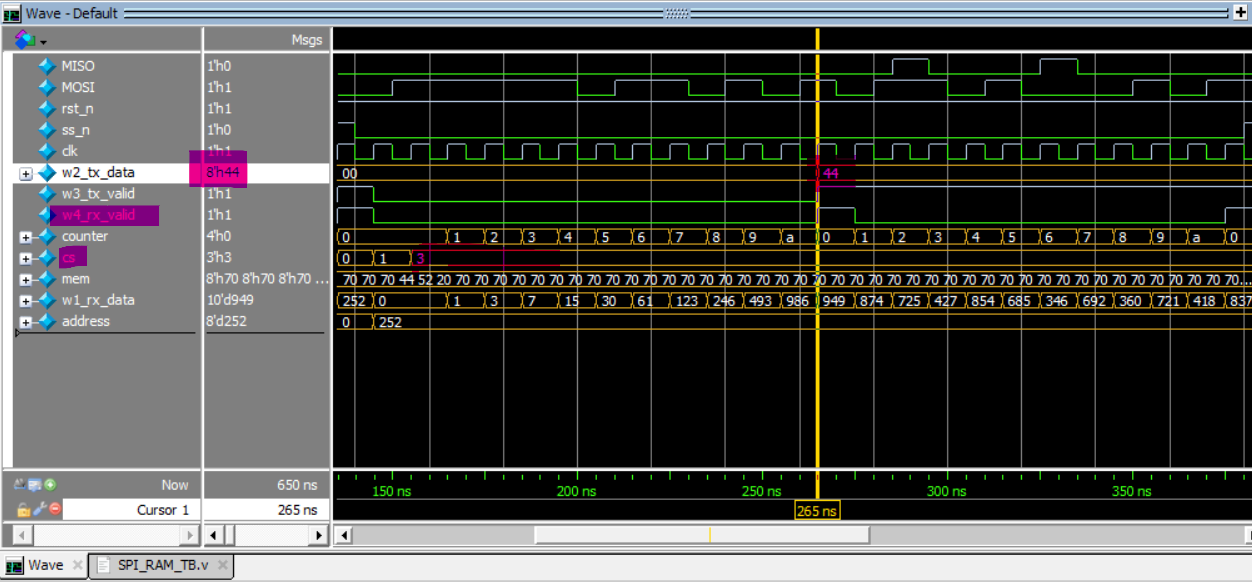
**2\_testing read address**



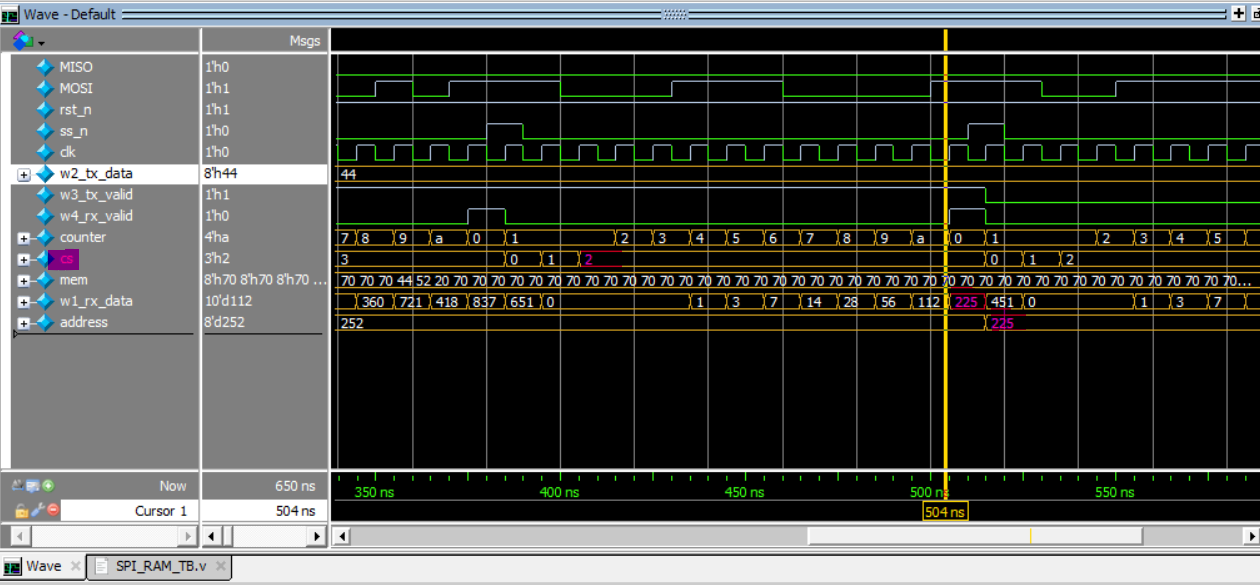
**3\_what was in the address**



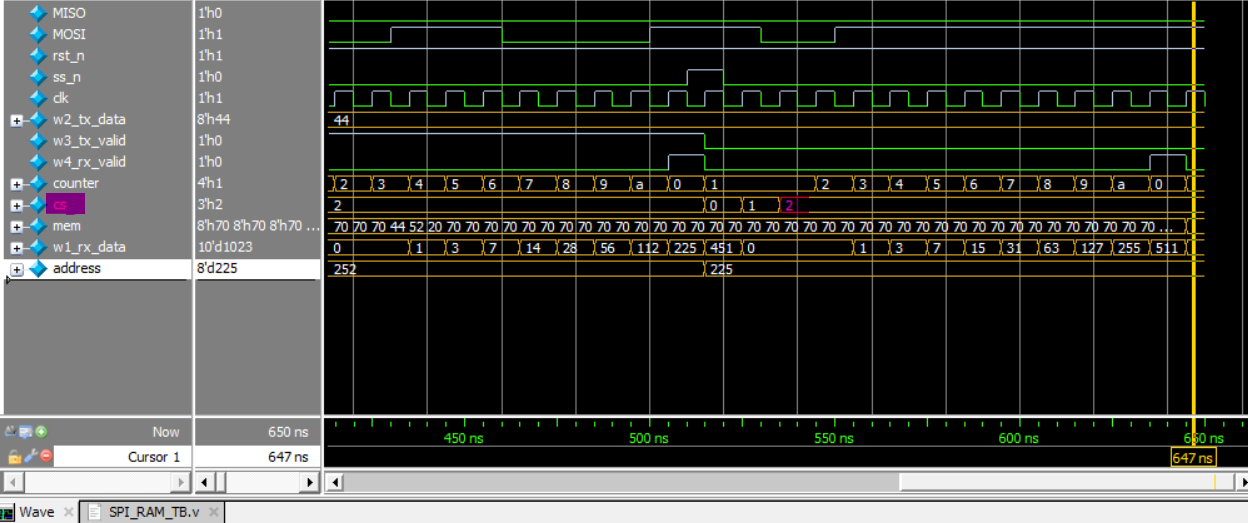
**4\_testing read data**



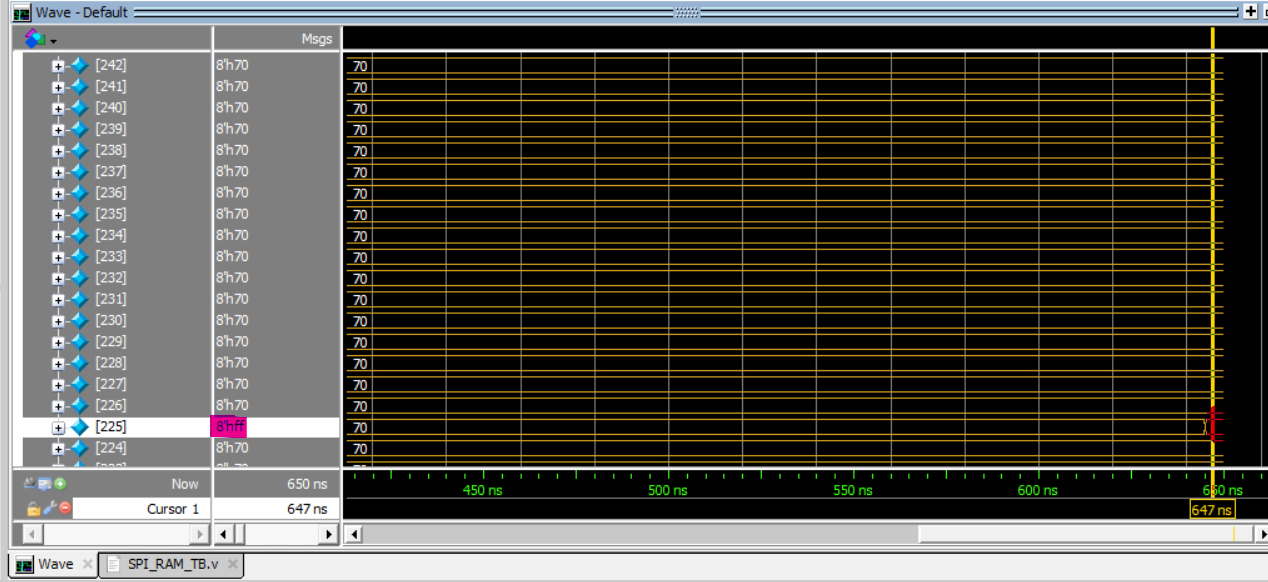
**5\_test write address**



**6\_testing write data**



**7\_what we wrote in TB is written in the address we determined**



**Questa Lint**

**A screenshot of a computer

AI-generated content may be incorrect.**

**VIVADO**

**(\* fsm\_encoding = "gray" \*)**

**Schematic elaboration  
A diagram of a computer

AI-generated content may be incorrect.**

**Schematic Synthesis**

**A diagram of a computer

AI-generated content may be incorrect.**

**A computer generated image of a computer

AI-generated content may be incorrect.**

Encoding from report

**A white paper with black text and numbers

AI-generated content may be incorrect.**

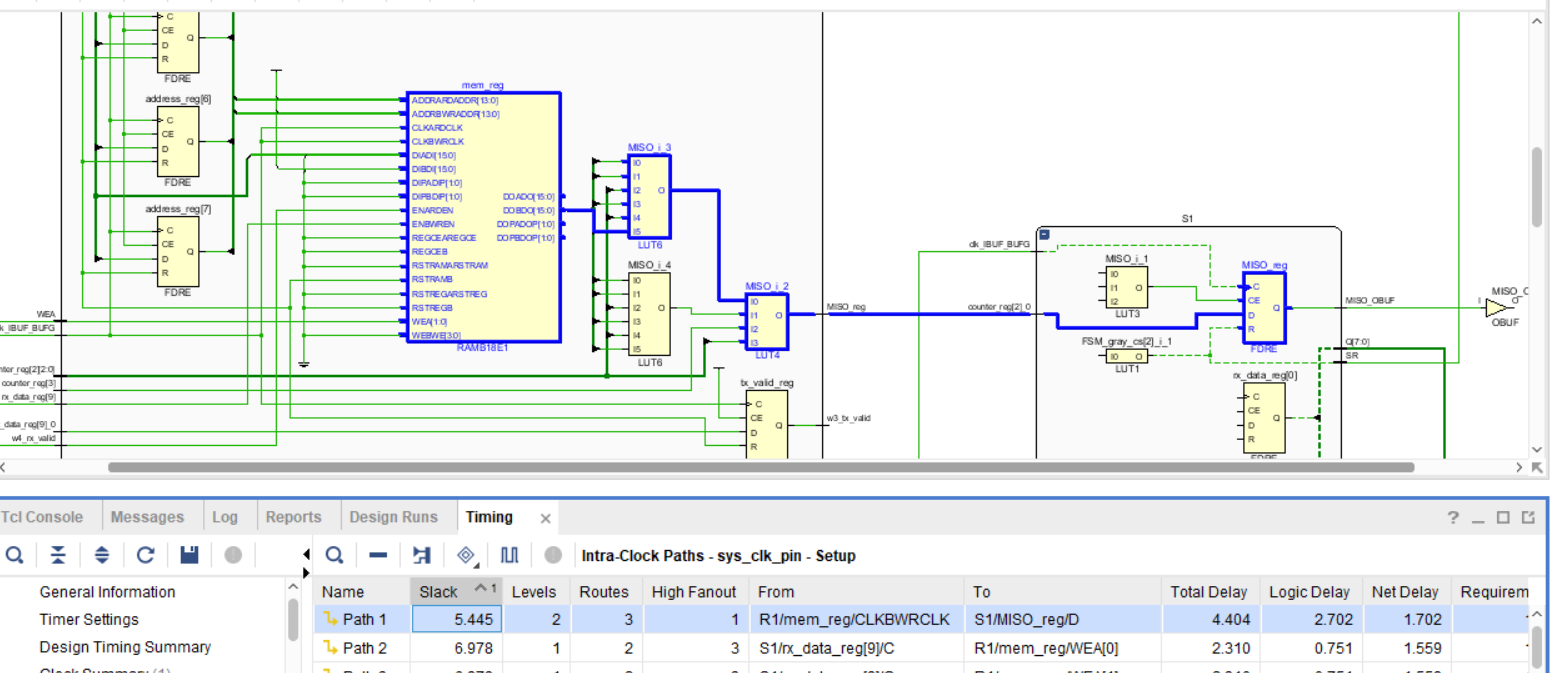
**Timing report**

**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer program

AI-generated content may be incorrect.**

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**Implementation**

**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Device:**

**A screenshot of a computer

AI-generated content may be incorrect.**

**(\* fsm\_encoding = "one\_hot" \*)**

**Elaborator**

**A computer screen shot of a diagram

AI-generated content may be incorrect.  
  
Schematic Synthesis:  
A computer drawing of a circuit board

AI-generated content may be incorrect.**

**Encoding Report:**

**A screen shot of a computer code

AI-generated content may be incorrect.**

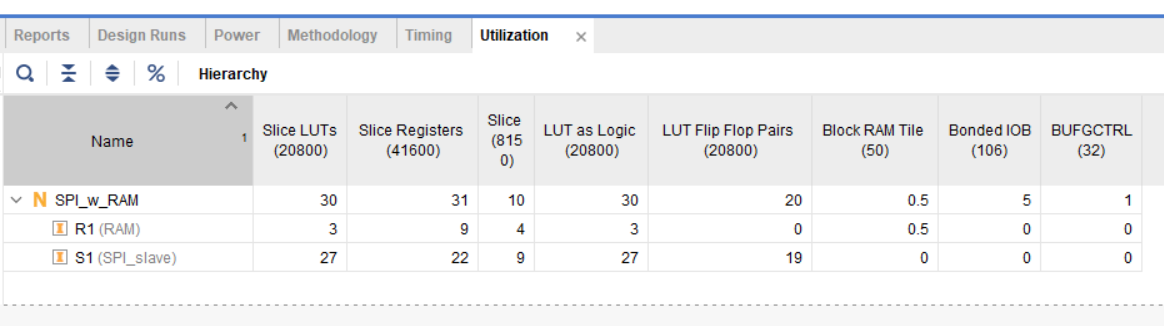
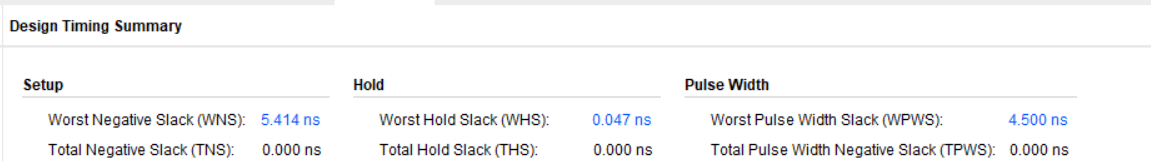
**Timing report:**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Critical pathA computer diagram of a computer

AI-generated content may be incorrect.**

**Implementation:   
  
**

**A screenshot of a computer screen

AI-generated content may be incorrect.**

**(\* fsm\_encoding = "sequential" \*)**

**Synthesis Schema:**A green and white diagram

AI-generated content may be incorrect.

Encoding report

**A white paper with black text and numbers

AI-generated content may be incorrect.**

Timing report:

**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer

AI-generated content may be incorrect.**

**Implementation  
  
A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer

AI-generated content may be incorrect.**

**(\* fsm\_encoding = "johnson" \*)**

**Synthesis schema**

**A computer drawing of a circuit board

AI-generated content may be incorrect.**

**Encoding Report:  
A screenshot of a computer screen

AI-generated content may be incorrect.**

**Timing report**

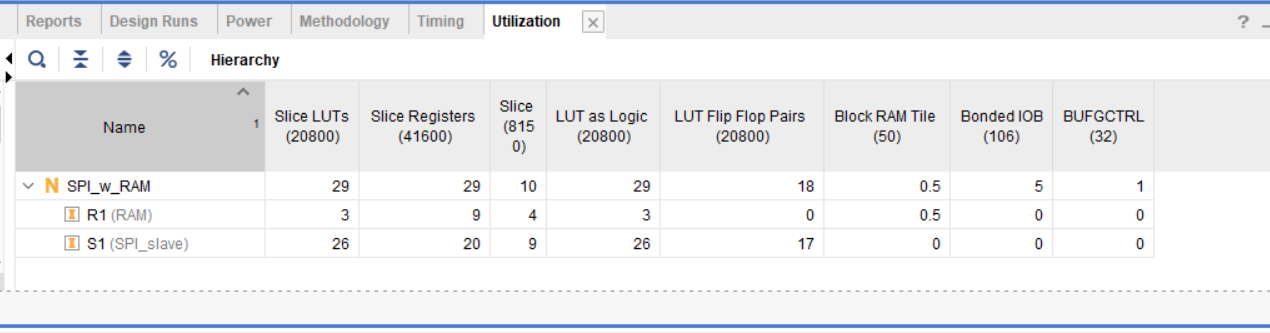
**A screenshot of a computer

AI-generated content may be incorrect.**

**A screenshot of a computer program

AI-generated content may be incorrect.**

**Implementation**

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**A screenshot of a computer

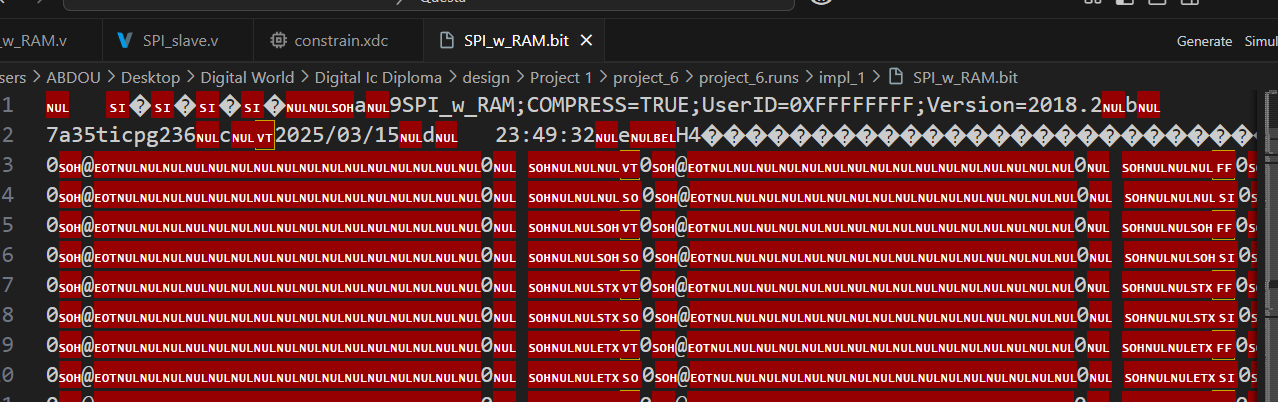
AI-generated content may be incorrect.A screenshot of a computer

AI-generated content may be incorrect.**

**Massages:  
 A screenshot of a computer

AI-generated content may be incorrect.**

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