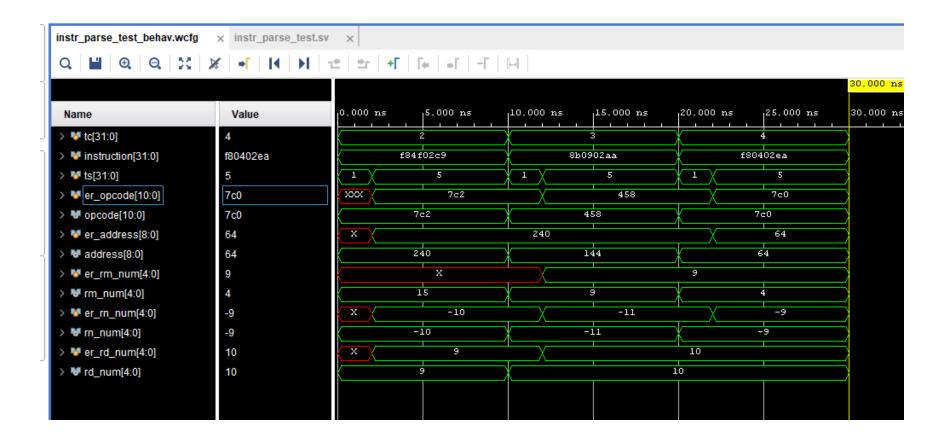
## Lab 4 – Reese Ford

02/12/2024



\*\*\*\*\* BEGIN TEST RESULTS \*\*\*\*\*\*

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Test Case 1
LDUR X9, [X22, #240]
+++ Step 1: Pass: |rn num| time = 2 ns | er = 22 | ar = 22 | er bits = 5 | ar bits = 5 +++
+++ Step 2: Pass: |rd num| time = 2 ns | er = 9 | ar = 9 | er bits = 5 | ar bits = 5 +++
+++ Step 3: Pass: |address| time = 2 ns | er = 240 | ar = 240 | er bits = 9 | ar bits = 9 +++
+++ Step 4: Pass: | opcode | time = 2 ns | er = 1986 | ar = 1986 | er | bits = 11 | ar | bits = 11 +++
Test Case 2
ADD X10, X21, X9
+++ Step 1: Pass: |rm num| time = 12 ns | er = 9 | ar = 9 | er bits = 5 | ar bits = 5 +++
+++ Step 2: Pass: |rn num| time = 12 ns | er = 21 | ar = 21 | er bits = 5 | ar bits = 5 +++
+++ Step 3: Pass: |rd num| time = 12 ns | er = 10 | ar = 10 | er bits = 5 | ar bits = 5 +++
+++ Step 4: Pass: | opcode | time = 12 ns | er = 1112 | ar = 1112 | er | bits = 11 | ar | bits = 11 +++
Test Case 3
STUR X10, [X23, #64]
+++ Step 1: Pass: |rn num| time = 22 ns | er = 23 | ar = 23 | er bits = 5 | ar bits = 5 +++
+++ Step 2: Pass: |rd num| time = 22 ns | er = 10 | ar = 10 | er bits = 5 | ar bits = 5 +++
+++ Step 3: Pass: |address| time = 22 ns | er = 64 | ar = 64 | er | bits = 9 | ar | bits = 9 +++
+++ Step 4: Pass: | opcode | time = 22 ns | er = 1984 | ar = 1984 | er | bits = 11 | ar | bits = 11 +++
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Pass Count = 12

Fail Count = 0

\*\*\*\*\* END TEST RESULTS \*\*\*\*\*\*



\*\*\*\*\* BEGIN TEST RESULTS \*\*\*\*\*\*

Test Case 1: | rr\_1 = 0 | rr\_2 = 5 | | wr = 0 | | wd = 0 | rw = 0 |

+++ Step 1: Pass: |read\_data1| time = 10 ns | er = 256 | ar = 256 | er\_bits = 64 | ar\_bits = 64 +++

+++ Step 2: Pass: |read\_data2| time = 10 ns | er = 4 | ar = 4 | er\_bits = 64 | ar\_bits = 64 +++

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Test Case 2: | rr 1 = 3 | rr 2 = 19 | | wr = 0 | | wd = 0 | rw = 0 |
+++ Step 1: Pass: |read_data1| time = 20 ns | er = 16 | ar = 16 | er_bits = 64 | ar | bits = 64 +++
+++ Step 2: Pass: |read_data2| time = 20 ns | er = 10 | ar = 10 | er_bits = 64 | ar_bits = 64 +++
Test Case 3: | rr 1 = 15 | rr 2 = 12 | | wr = 0 | | wd = 0 | rw = 0 |
+++ Step 1: Pass: |read data1| time = 30 ns | er = 129 | ar = 129 | er bits = 64 | ar bits = 64 +++
+++ Step 2: Pass: |read data2| time = 30 ns | er = 17 | ar = 17 | er bits = 64 | ar bits = 64 +++
Test Case 4: | rr 1 = 0 | rr 2 = 12 | | wr = 0 | | wd = 55 | rw = 1 |
+++ Step 1: Pass: |read_data1| time = 40 ns | er = 256 | ar = 256 | er_bits = 64 | ar bits = 64 +++
+++ Step 2: Pass: |read_data2| time = 40 ns | er = 17 | ar = 17 | er_bits = 64 | ar_bits = 64 +++
Test Case 5: | rr 1 = 0 | rr 2 = 15 | | wr = 0 | | wd = 55 | rw = 1 |
+++ Step 1: Pass: |read data1| time = 50 ns | er = 55 | ar = 55 | er bits = 64 | ar bits = 64 +++
+++ Step 2: Pass: |read data2| time = 50 ns | er = 129 | ar = 129 | er bits = 64 | ar bits = 64 +++
Test Case 6: | rr 1 = 0 | rr 2 = 15 | | wr = 15 | | wd = -354 | rw = 1 |
+++ Step 1: Pass: |read data1| time = 66 ns | er = 55 | ar = 55 | er bits = 64 | ar bits = 64 +++
+++ Step 2: Pass: |read data2| time = 66 ns | er = -354 | ar = -354 | er bits = 64 | ar bits = 64 +++
Test Case 7: | rr 1 = 0 | rr 2 = 15 | | wr = 15 | | wd = 23456 | rw = 0 |
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+++ Step 1: Pass: |read_data1| time = 86 ns | er = 55 | ar = 55 | er_bits = 64 | ar_bits = 64 +++

+++ Step 2: Pass: |read_data2| time = 86 ns | er = -354 | ar = -354 | er_bits = 64 | ar_bits = 64 +++

Test Case 8: | rr_1 = 15 | rr_2 = 15 | | wr = 15 | | wd = 23456 | rw = 0 |

+++ Step 1: Pass: |read_data1| time = 94 ns | er = 55 | ar = 55 | er_bits = 64 | ar_bits = 64 +++

+++ Step 2: Pass: |read_data2| time = 94 ns | er = -354 | ar = -354 | er_bits = 64 | ar_bits = 64 +++

Test Case 9: | rr_1 = 15 | rr_2 = 15 | | wr = 15 | | wd = 23456 | rw = 0 |

+++ Step 1: Pass: |read_data1| time = 96 ns | er = -354 | ar = -354 | er_bits = 64 | ar_bits = 64 +++

+++ Step 2: Pass: |read_data2| time = 96 ns | er = -354 | ar = -354 | er_bits = 64 | ar_bits = 64 +++
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Pass Count = 18

Fail Count = 0

\*\*\*\*\*\* END TEST RESULTS \*\*\*\*\*\*