

# Report Generated by Test Manager

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**Title:** Test  
**Author:** Athira Varma J  
**Date:** 04-Feb-2019 13:26:45





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## Test Environment

Platform: PCWIN64  
MATLAB: (R2018b)

## Summary


| Name  | Outcome  | Duration<br>(Seconds) |
|---|--|-----------------------|
| <a href="#">Results: 2019-Feb-03 15:48:42</a>   | 30  2  | 607                   |
|  <a href="#">New Test Suite 1</a>                              | 30  2  | 600                   |
|  <a href="#">Init State</a>                                    |   | 17                    |
|  <a href="#">FB_Select State</a>                               |   | 20                    |
|  <a href="#">Fetch State 1st Input and verify Addr output</a>  |   | 20                    |
|  <a href="#">Fetch State 2nd Input</a>                         |   | 19                    |
|  <a href="#">Fetch State 3rd Input</a>                         |   | 18                    |
|  <a href="#">Execute State</a>                                 |   | 19                    |
|  <a href="#">Write State 1st output</a>                        |   | 19                    |
|  <a href="#">Write State 2nd Output</a>                        |   | 18                    |
|  <a href="#">FB Done state</a>                               |   | 17                    |
|  <a href="#">Error in FB Select State</a>                    |   | 18                    |
|  <a href="#">Error in Fetch State</a>                        |   | 17                    |
|  <a href="#">Recoverable Error</a>                           |   | 18                    |
|  <a href="#">FB Select to FETCH State</a>                    |   | 18                    |
|  <a href="#">Non Recoverable Error</a>                       |   | 17                    |
|  <a href="#">Non Recoverable Error to INIT</a>               |   | 19                    |
|  <a href="#">Error in Write State</a>                        |   | 19                    |
|  <a href="#">End of Sequence</a>                             |   | 18                    |
|  <a href="#">Task Done to INIT</a>                           |   | 18                    |
|  <a href="#">Error in LATCH_ADDR substate in Fetch State</a> |   | 18                    |
|  <a href="#">Error in MEM_WAIT substate in Fetch State</a>   |   | 19                    |
|  <a href="#">Error in CTRL_HI SubState in Fetch State</a>    |   | 19                    |

|  |   |    |
|--|---|----|
|  <a href="#">Error in CTRL_LO substate in Fetch State</a>         |    | 18 |
|  <a href="#">Error in INCREMENT_INST Substate in Fetch state</a>  |    | 18 |
|  <a href="#">Error in INST_WAIT Substate in Fetch state</a>       |    | 19 |
|  <a href="#">Error in CTRL_HI Substate in FB_EXECUTE state</a>    |    | 19 |
|  <a href="#">Error in CTRL_LO Substate in FB_EXECUTE state</a>    |    | 18 |
|  <a href="#">Error in LATCH_ADDR Substate in Write state</a>      |    | 18 |
|  <a href="#">Error in CTRL_HI Substate in Write state</a>         |    | 19 |
|  <a href="#">Error in CTRL_LO Substate in Write state</a>         |    | 21 |
|  <a href="#">Error in WRITE Substate in Write state</a>           |    | 23 |
|  <a href="#">Error in INCREMENT_INST Substate in Write state</a> |   | 22 |
|  <a href="#">Error in INST_WAIT Substate in Write state</a>     |  | 20 |

## Results: 2019-Feb-03 15:48:42

Result Type: Result Set  
Parent: None  
Start Time: 2019-Feb-03 15:48:42  
End Time: 2019-Feb-03 15:58:49  
Outcome: Total: 32, Passed: 30, Failed: 2

### Aggregated Coverage Results

| Analyzed Model  | Sim Mode | Complexity | Decision | Condition | MCDC | Execution |
|---|----------|------------|----------|-----------|------|-----------|
|  <a href="#">local sequencer</a> | Normal   | 61         | 99%      | 100%      | NaN% | 97%       |

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## New Test Suite 1

### Test Result Information

Result Type: Test Suite Result  
Parent: [Results: 2019-Feb-03 15:48:42](#)  
Start Time: 2019-Feb-03 15:48:49  
End Time: 2019-Feb-03 15:58:49  
Outcome: Total: 32, Passed: 30, Failed: 2

### Test Suite Information

Name: New Test Suite 1

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## Init State

### Test Result Information

Result Type: Test Case Result  
Parent: [New Test Suite 1](#)  
Start Time: 2019-Feb-03 15:48:49  
End Time: 2019-Feb-03 15:49:06  
Outcome: Passed  
Description:

Verify that in Init state all the outputs task\_done, inst\_ptr, task\_error, latch\_addr, write, ctrl, abort and fb\_select of local sequencer are reset to 0.  
The instruction pointer should be reset to 0 to point to the first instruction.

### **Test Case Information**

Name: Init State  
Type: Baseline Test

### **Test Case Requirements**

Description: INIT (local\_sequencer\_req#13)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |  |
|---|--|
| ✓ Test Assessment Block/Run:verify(task_done == 0)      |  |
| ✓ Test Assessment Block/Run:verify(inst_ptr == 0)       |  |
| ✓ Test Assessment Block/Run:verify(task_error == 0)     |  |
| ✓ Test Assessment Block/Run:verify(latch_addr == 0)     |  |
| ✓ Test Assessment Block/Run:verify(write == 0)          |  |
| ✓ Test Assessment Block/Run:verify(ctrl == 0)           |  |
| ✓ Test Assessment Block/Run:verify(abort == 0)          |  |
| ✓ Test Assessment Block/Run:verify(fb_select == 0)      |  |
| ✗ Test Assessment Block/step2:verify(task_done == 0)    |  |
| ✗ Test Assessment Block/step2:verify(inst_ptr == 0)     |  |
| ✗ Test Assessment Block/step2:verify(task_error == 0)   |  |
| ✗ Test Assessment Block/step2:verify(latch_addr == 0)   |  |
| ✗ Test Assessment Block/step2:verify(write == 0)        |  |
| ✗ Test Assessment Block/step2:verify(ctrl == 0)         |  |
| ✗ Test Assessment Block/step2:verify(abort == 0)        |  |
| ✗ Test Assessment Block/step2:verify(fb_select == 42)   |  |
| ✗ Test Assessment Block/step3:verify(task_done == 0)    |  |
| ✗ Test Assessment Block/step3:verify(inst_ptr == 1)     |  |
| ✗ Test Assessment Block/step3:verify(task_error == 0)   |  |
| ✗ Test Assessment Block/step3:verify(latch_addr == 0)   |  |
| ✗ Test Assessment Block/step3:verify(write == 0)        |  |
| ✗ Test Assessment Block/step3:verify(ctrl == 0)         |  |
| ✗ Test Assessment Block/step3:verify(abort == 0)        |  |
| ✗ Test Assessment Block/step3:verify(fb_select == 42)   |  |
| ✗ Test Assessment Block/step4:verify(task_done == 0)    |  |
| ✗ Test Assessment Block/step4:verify(inst_ptr == 1)     |  |
| ✗ Test Assessment Block/step4:verify(task_error == 0)   |  |
| ✗ Test Assessment Block/step4:verify(latch_addr == 1)   |  |
| ✗ Test Assessment Block/step4:verify(int32(addr) == 32) |  |
| ✗ Test Assessment Block/step4:verify(write == 0)        |  |
| ✗ Test Assessment Block/step4:verify(ctrl == 0)         |  |
| ✗ Test Assessment Block/step4:verify(abort == 0)        |  |
| ✗ Test Assessment Block/step4:verify(fb_select == 42)   |  |
| ✗ Test Assessment Block/step5:verify(task_done == 0)    |  |
| ✗ Test Assessment Block/step5:verify(inst_ptr == 1)     |  |
| ✗ Test Assessment Block/step5:verify(task_error == 0)   |  |
| ✗ Test Assessment Block/step5:verify(latch_addr == 0)   |  |
| ✗ Test Assessment Block/step5:verify(write == 0)        |  |
| ✗ Test Assessment Block/step5:verify(ctrl == 0)         |  |
| ✗ Test Assessment Block/step5:verify(abort == 0)        |  |
| ✗ Test Assessment Block/step5:verify(fb_select == 42)   |  |
| ✗ Test Assessment Block/step6:verify(task_done == 0)    |  |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 10   |
| Checksum:              | 2946405130 1670660317 3481170102 1295358117  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:48:50  |
| Simulation Stop Time:  | 2019-02-03 15:48:55  |
| Platform:              | PCWIN64  |

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## FB\_Select State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:49:06             |
| End Time:    | 2019-Feb-03 15:49:26             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that with a trigger from global sequencer, the task execution is initiated.

Verify that the state transitions from INIT to FB\_SELECT.

Verify that the function number register and start instruction pointer register are latched to the first instruction in the sequence

Verify that in the next cycle the instruction pointer increments..

### **Test Case Information**

Name: FB\_Select State

Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#21)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: FB\_SELECT (local\_sequencer\_req#14)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Function Block Selection Service Provided (local\_sequencer\_req#33)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Trigger Service Received (local\_sequencer\_req#1)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Instruction Service Received (local\_sequencer\_req#2)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Function Number Register (local\_sequencer\_req#8)













Document: [local\\_sequencer\\_req.slreqx](#)

Description: Start Instruction Pointer Register (local\_sequencer\_req#9)

Document: [local\\_sequencer\\_req.slreqx](#)



## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 10   |
| Checksum:              | 2946405130 1670660317 3481170102 1295358117  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:49:10  |
| Simulation Stop Time:  | 2019-02-03 15:49:14  |
| Platform:              | PCWIN64  |

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## Fetch State 1st Input and verify Addr output

### Test Result Information

|                   |                                      |
|-------------------|--------------------------------------|
| Result Type:      | Test Case Result                     |
| Parent:           | <a href="#">New Test Suite 1</a>     |
| Start Time:       | 2019-Feb-03 15:49:26                 |
| End Time:         | 2019-Feb-03 15:49:46                 |
| Outcome:          | <b>Failed</b>                        |
| Cause of Failure: | <b>Failed criteria: Verification</b> |
| Description:      |                                      |

Verify that the state switches to Fetch automatically.  
Verify that there is one cycle of wait state for data to be available to function blocks from task memories.

Verify that in the next cycle a ctrl pulse is sent to function blocks to begin execution.

Verify that after 2 cycles the instruction pointer is incremented.

### **Test Case Information**

Name: Fetch State 1st Input and verify Addr output  
Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#22)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: Conversion of Data Input (local\_sequencer\_req#34)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: Current Address Register (local\_sequencer\_req#11)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |  |
|---|--|
|  Test Assessment Block/Run:verify(task_done == 0)        |  |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |  |
|  Test Assessment Block/Run:verify(task_error == 0)       |  |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |  |
|  Test Assessment Block/Run:verify(write == 0)            |  |
|  Test Assessment Block/Run:verify(ctrl == 0)             |  |
|  Test Assessment Block/Run:verify(abort == 0)            |  |
|  Test Assessment Block/Run:verify(fb_select == 0)        |  |
|  Test Assessment Block/step2:verify(task_done == 0)      |  |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |  |
|  Test Assessment Block/step2:verify(task_error == 0)     |  |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |  |
|  Test Assessment Block/step2:verify(write == 0)          |  |
|  Test Assessment Block/step2:verify(ctrl == 0)           |  |
|  Test Assessment Block/step2:verify(abort == 0)         |  |
|  Test Assessment Block/step2:verify(fb_select == 42)   |  |
|  Test Assessment Block/step3:verify(task_done == 0)    |  |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |  |
|  Test Assessment Block/step3:verify(task_error == 0)   |  |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |  |
|  Test Assessment Block/step3:verify(write == 0)        |  |
|  Test Assessment Block/step3:verify(ctrl == 0)         |  |
|  Test Assessment Block/step3:verify(abort == 0)        |  |
|  Test Assessment Block/step3:verify(fb_select == 42)   |  |
|  Test Assessment Block/step4:verify(task_done == 0)    |  |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |  |
|  Test Assessment Block/step4:verify(task_error == 0)   |  |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |  |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |  |
|  Test Assessment Block/step4:verify(write == 0)        |  |
|  Test Assessment Block/step4:verify(ctrl == 0)         |  |
|  Test Assessment Block/step4:verify(abort == 0)        |  |
|  Test Assessment Block/step4:verify(fb_select == 42)   |  |
|  Test Assessment Block/step5:verify(task_done == 0)    |  |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |  |
|  Test Assessment Block/step5:verify(task_error == 0)   |  |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |  |
|  Test Assessment Block/step5:verify(write == 0)        |  |
|  Test Assessment Block/step5:verify(ctrl == 0)         |  |
|  Test Assessment Block/step5:verify(abort == 0)        |  |
|  Test Assessment Block/step5:verify(fb_select == 42)   |  |
|  Test Assessment Block/step6:verify(task_done == 0)    |  |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 20   |
| Checksum:              | 2270349598 670375184 1745057116 3272137456   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:49:30  |
| Simulation Stop Time:  | 2019-02-03 15:49:35  |
| Platform:              | PCWIN64  |

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## Fetch State 2nd Input

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:49:46             |
| End Time:    | 2019-Feb-03 15:50:05             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state remains in Fetch if the super state (upper 4 bits of Code in status signal) has not changed but the code data bits 22 through 27 has been incremented once indicating a super state iteration.

Verify that the 2nd input fetch address in the instruction sequence is latched on to the addr output.

Verify that there is one cycle of wait state for data to be available to function blocks from task memories.

Verify that a ctrl pulse is sent to function blocks to begin execution.

Verify that the instruction pointer is incremented.

### **Test Case Information**

Name: Fetch State 2nd Input

Type: Baseline Test

### **Test Case Requirements**

Description: FETCH (local\_sequencer\_req#15)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Transitions (local\_sequencer\_req#23)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Task Memory Control Service Provided (local\_sequencer\_req#31)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Super State Iteration Detection (local\_sequencer\_req#4)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Function Block Status Service Received (local\_sequencer\_req#3)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 27   |
| Checksum:              | 4144241666 3890879107 3895079110 4102482403  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:49:50  |
| Simulation Stop Time:  | 2019-02-03 15:49:55  |
| Platform:              | PCWIN64  |

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## Fetch State 3rd Input

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:50:05             |
| End Time:    | 2019-Feb-03 15:50:23             |
| Outcome:     | Passed                           |
| Description: |                                  |



Verify that the state remains in Fetch if the super state (upper 4 bits of Code in status signal) has not changed but the code data bits 22 through 27 has been incremented once indicating a super state iteration.

Verify that the 3rd input fetch address in the instruction sequence is latched on to the addr output.

Verify that there is one cycle of wait state for data to be available to function blocks from task memories.

Verify that a ctrl pulse is sent to function blocks to begin execution.

Verify that the instruction pointer is incremented.

Verify that the state stays in Fetch until the super state change from global sequencer is detected.

### **Test Case Information**

Name: Fetch State 3rd Input

Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Instruction Pointer Service Provided (local\_sequencer\_req#32)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 35   |
| Checksum:              | 842347142 1364152625 118353973 750445995   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\Sympl<br>eVerification\Local_Sequencer\local_sequencer.s<br>lx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:50:08  |
| Simulation Stop Time:  | 2019-02-03 15:50:14  |
| Platform:              | PCWIN64  |

---

## Execute State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:50:23             |
| End Time:    | 2019-Feb-03 15:50:42             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state changes to Execute if the super state (upper 4 bits of Code in status signal) has changed indicating next state.

Verify that a ctrl pulse is sent to the function blocks for execution.

### **Test Case Information**

Name: Execute State

Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: FB\_EXECUTE (local\_sequencer\_req#16)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 40   |
| Checksum:              | 2155861879 2434011949 3506385149 1882827719  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:50:27  |
| Simulation Stop Time:  | 2019-02-03 15:50:32  |
| Platform:              | PCWIN64  |

---

## Write State 1st output

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:50:42             |
| End Time:    | 2019-Feb-03 15:51:01             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state changes to Write if the super state (upper 4 bits of Code in status signal) has changed indicating next state.

Verify that the output address in the instruction sequence is latched on to the addr output.

Verify that a ctrl pulse is sent to function blocks to begin execution.

Verify that the write output is set high to allow the function block to write the result to the current address.

Verify that the instruction pointer is incremented after one cycle.

### **Test Case Information**

Name: Write State 1st output

Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#24)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Instruction Counter (local\_sequencer\_req#10)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |



## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 45   |
| Checksum:              | 3900731963 119908724 348568191 1213259021  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:50:46  |
| Simulation Stop Time:  | 2019-02-03 15:50:51  |
| Platform:              | PCWIN64  |

---

## Write State 2nd Output

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:51:01             |
| End Time:    | 2019-Feb-03 15:51:19             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state remains in Write if the super state (upper 4 bits of Code in status signal) has not changed but the code data bits 22 through 27 has been incremented once indicating a super state iteration.

Verify that the 2nd output address in the instruction sequence is latched on to the addr output.

Verify that a ctrl pulse is sent to function blocks to begin execution.

Verify that the write output is set high to allow the function block to write the result to the current address.

Verify that the instruction pointer is incremented.

### **Test Case Information**

Name: Write State 2nd Output

Type: Baseline Test

### **Test Case Requirements**

Description: WRITE (local\_sequencer\_req#17)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 50   |
| Checksum:              | 3997566239 2242021523 3449075664 2081074619  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:51:04  |
| Simulation Stop Time:  | 2019-02-03 15:51:09  |
| Platform:              | PCWIN64  |

---

## FB Done state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:51:19             |
| End Time:    | 2019-Feb-03 15:51:36             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state changes to FB\_DONE if the super state (upper 4 bits of Code in status signal) has changed indicating next state.

Verify that a ctrl pulse is sent to function blocks to progress its state.

Verify that an Error while in FB\_Done state does not cause it the local sequencer to move to the ERROR state.

### **Test Case Information**

Name: FB Done state  
Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#25)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: FB\_DONE (local\_sequencer\_req#18)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: Super State Change Detection (local\_sequencer\_req#5)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: Function Block Status Service Received (local\_sequencer\_req#3)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 60   |
| Checksum:              | 3957168329 1543921322 1911777152 1761218249  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:51:22  |
| Simulation Stop Time:  | 2019-02-03 15:51:27  |
| Platform:              | PCWIN64  |

---

## Error in FB Select State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:51:36             |
| End Time:    | 2019-Feb-03 15:51:54             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state changes to FB\_SELECT if the super state (upper 4 bits of Code in status signal) has changed indicating next state.

Verify that the function number register and start instruction pointer register are latched to the 2nd function block instruction in the sequence.

Verify that the instruction pointer is incremented.

Verify that an Error while in FB\_SELECT state does not cause it the local sequencer to move to the ERROR state.

### **Test Case Information**

Name: Error in FB Select State

Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#26)

Document: [local\\_sequencer\\_req.slreqx](#)



## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 60   |
| Checksum:              | 3957168329 1543921322 1911777152 1761218249  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:51:40  |
| Simulation Stop Time:  | 2019-02-03 15:51:44  |
| Platform:              | PCWIN64  |

---

## Error in Fetch State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:51:54             |
| End Time:    | 2019-Feb-03 15:52:11             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state switches to Fetch automatically.

Verify that the fetch address in the instruction sequence is latched on the addr output.

Verify that the state switches to ERROR if the Error signal in Status input is true.

Verify that a ctrl pulse is sent to function blocks.

Verify that abort and Task\_Error output signals are set to false if the lower 22 bits of the Code in Status signal indicate a recoverable error.

### **Test Case Information**

Name: Error in Fetch State

Type: Baseline Test

### **Test Case Requirements**

Description: ERROR (local\_sequencer\_req#20)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 65   |
| Checksum:              | 799440849 4060682207 132053812 1287153246  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\Sympl<br>eVerification\Local_Sequencer\local_sequencer.s<br>lx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:51:57  |
| Simulation Stop Time:  | 2019-02-03 15:52:02  |
| Platform:              | PCWIN64  |

---

## Recoverable Error

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:52:11             |
| End Time:    | 2019-Feb-03 15:52:29             |
| Outcome:     | Passed                           |
| Description: |                                  |

If the lower 22 bits of the Code in Status signal indicate a recoverable error, verify that the state changes from ERROR to FB\_SELECT.

With a recoverable error verify that the instruction pointer is loaded with the value stored in the start instruction pointer register.

Verify that the instruction pointer is incremented.

### **Test Case Information**

Name: Recoverable Error  
Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#28)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: Error Recovery Determination (local\_sequencer\_req#6)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: Function Block Status Service Received (local\_sequencer\_req#3)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 70   |
| Checksum:              | 2752943682 1142429451 1244692139 1047519825  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:52:15  |
| Simulation Stop Time:  | 2019-02-03 15:52:20  |
| Platform:              | PCWIN64  |

---

## FB Select to FETCH State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:52:29             |
| End Time:    | 2019-Feb-03 15:52:47             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state switches to Fetch automatically.



Verify that the fetch address in the instruction sequence is latched on the addr output.

Verify that there is one cycle of wait state for data to be available to function blocks from task memories.

Verify that in the next cycle a ctrl pulse is sent to function blocks to begin execution.

Verify that after 2 cycles the instruction pointer is incremented.

### **Test Case Information**

Name: FB Select to FETCH State

Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#22)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 70   |
| Checksum:              | 2752943682 1142429451 1244692139 1047519825  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:52:33  |
| Simulation Stop Time:  | 2019-02-03 15:52:37  |
| Platform:              | PCWIN64  |

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## Non Recoverable Error

### Test Result Information

|                   |                                      |
|-------------------|--------------------------------------|
| Result Type:      | Test Case Result                     |
| Parent:           | <a href="#">New Test Suite 1</a>     |
| Start Time:       | 2019-Feb-03 15:52:47                 |
| End Time:         | 2019-Feb-03 15:53:04                 |
| Outcome:          | <b>Failed</b>                        |
| Cause of Failure: | <b>Failed criteria: Verification</b> |
| Description:      |                                      |

Verify that the state changes to Execute if the super state (upper 4 bits of Error Code in status signal) has changed indicating next state.

Verify that a ctrl pulse is sent to the function blocks for execution.

Verify that the state switches to ERROR if the Error signal in Status input is true. If the lower 22 bits of the Code in Status signal indicate a non recoverable error, verify that a ctrl and abort signals are pulsed for one cycle.

Verify that the Task\_Error output is set to true until the Trigger goes low.

### **Test Case Information**

Name: Non Recoverable Error

Type: Baseline Test

### **Test Case Requirements**

Description: ERROR (local\_sequencer\_req#20)

Document: [local\\_sequencer\\_req.slreqx](#)

Description: Error Signal Service Provided (local\_sequencer\_req#29)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 70   |
| Checksum:              | 2752943682 1142429451 1244692139 1047519825  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:52:50  |
| Simulation Stop Time:  | 2019-02-03 15:52:55  |
| Platform:              | PCWIN64  |

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## Non Recoverable Error to INIT

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:53:04             |
| End Time:    | 2019-Feb-03 15:53:23             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state transitions from ERROR state to INIT if the error is not recoverable and the trigger from the global sequencer is low.

Verify if in Init state all the outputs are reset to 0.  
The instruction pointer should be reset to 0 to point to the first instruction in the sequence

### **Test Case Information**

Name: Non Recoverable Error to INIT  
Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#28)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |



## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 70   |
| Checksum:              | 2752943682 1142429451 1244692139 1047519825  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:53:08  |
| Simulation Stop Time:  | 2019-02-03 15:53:13  |
| Platform:              | PCWIN64  |

---

## Error in Write State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:53:23             |
| End Time:    | 2019-Feb-03 15:53:42             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that with a trigger from global sequencer, the task execution is initiated. The state transitions from INIT to FB\_SELECT.

Verify that the function number register and start instruction pointer register are latched to the first instruction in the sequence.

Verify that the instruction pointer increments.

Verify that the write state is entered.

Verify that Error state is entered from write state if error is detected.

### **Test Case Information**

|       |                      |
|-------|----------------------|
| Name: | Error in Write State |
| Type: | Baseline Test        |

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 100  |
| Checksum:              | 2093908169 3179825545 579071532 4249762891   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\Sympl<br>eVerification\Local_Sequencer\local_sequencer.s<br>lx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:53:27  |
| Simulation Stop Time:  | 2019-02-03 15:53:32  |
| Platform:              | PCWIN64  |

---

## End of Sequence

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:53:42             |
| End Time:    | 2019-Feb-03 15:54:00             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that state moves to Task\_Done from FB\_Done state once function block signals a new state and EOF flag is the current instruction.

Verify that Task\_Done output is set to TRUE while in the Task\_Done state.

### **Test Case Information**

Name: End of Sequence  
Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#26)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: TASK\_DONE (local\_sequencer\_req#19)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: Task Done Service Provided (local\_sequencer\_req#30)  
Document: [local\\_sequencer\\_req.slreqx](#)  
Description: End of File Determination (local\_sequencer\_req#7)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:53:45  |
| Simulation Stop Time:  | 2019-02-03 15:53:50  |
| Platform:              | PCWIN64  |

---

## Task Done to INIT

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:54:00             |
| End Time:    | 2019-Feb-03 15:54:18             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that the state moves from Task\_Done to INIT state once Trigger goes low.

### **Test Case Information**

Name: Task Done to INIT  
Type: Baseline Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#27)  
Document: local\_sequencer\_req.slreqx



## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 130  |
| Checksum:              | 3561885442 3679184002 1957729918 2315183824  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:54:03  |
| Simulation Stop Time:  | 2019-02-03 15:54:08  |
| Platform:              | PCWIN64  |

---

## Error in LATCH\_ADDR substate in Fetch State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:54:18             |
| End Time:    | 2019-Feb-03 15:54:36             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the LATCH\_ADDR substate of Fetch state if Error is detected.

**Test Case Information**

Name: Error in LATCH\_ADDR substate in Fetch State  
Type: Simulation Test

**Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 130  |
| Checksum:              | 3561885442 3679184002 1957729918 2315183824  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:54:22  |
| Simulation Stop Time:  | 2019-02-03 15:54:27  |
| Platform:              | PCWIN64  |

---

## Error in MEM\_WAIT substate in Fetch State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:54:36             |
| End Time:    | 2019-Feb-03 15:54:55             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the MEM\_WAIT substate of Fetch state if Error is detected.

### **Test Case Information**

Name: Error in MEM\_WAIT substate in Fetch State  
Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 150  |
| Checksum:              | 1012164172 3728227656 1028335012 1189976733  |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:54:40  |
| Simulation Stop Time:  | 2019-02-03 15:54:45  |
| Platform:              | PCWIN64  |

---

## Error in CTRL\_HI SubState in Fetch State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:54:55             |
| End Time:    | 2019-Feb-03 15:55:14             |
| Outcome:     | Passed                           |
| Description: |                                  |



Verify that Error state is entered from the CTRL\_HI substate of Fetch state if Error is detected.

### **Test Case Information**

Name: Error in CTRL\_HI SubState in Fetch State  
Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:54:58  |
| Simulation Stop Time:  | 2019-02-03 15:55:04  |
| Platform:              | PCWIN64  |

---

## Error in CTRL\_LO substate in Fetch State

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:55:14             |
| End Time:    | 2019-Feb-03 15:55:32             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the CTRL\_LO substate of Fetch state if Error is detected.

**Test Case Information**

Name: Error in CTRL\_LO substate in Fetch State  
Type: Simulation Test

**Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:55:17  |
| Simulation Stop Time:  | 2019-02-03 15:55:22  |
| Platform:              | PCWIN64  |

---

## Error in INCREMENT\_INST Substate in Fetch state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:55:32             |
| End Time:    | 2019-Feb-03 15:55:50             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the INCREMENT\_INST substate of Fetch state if Error is detected.

### **Test Case Information**

Name: Error in INCREMENT\_INST Substate in Fetch state  
Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |



## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:55:36  |
| Simulation Stop Time:  | 2019-02-03 15:55:41  |
| Platform:              | PCWIN64  |

---

## Error in INST\_WAIT Substate in Fetch state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:55:50             |
| End Time:    | 2019-Feb-03 15:56:09             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the INST\_WAIT substate of Fetch state if Error is detected.

**Test Case Information**

Name: Error in INST\_WAIT Substate in Fetch state  
Type: Simulation Test

**Test Case Requirements**

Description: Transitions (local\_sequencer\_req#23)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:55:54  |
| Simulation Stop Time:  | 2019-02-03 15:55:59  |
| Platform:              | PCWIN64  |

---

## Error in CTRL\_HI Substate in FB\_EXEC UTE state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:56:09             |
| End Time:    | 2019-Feb-03 15:56:28             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the CTRL\_HI substate of FB\_EXECUTE state if Error is detected.

### **Test Case Information**

Name: Error in CTRL\_HI Substate in FB\_EXECUTE state  
Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#24)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:56:13  |
| Simulation Stop Time:  | 2019-02-03 15:56:18  |
| Platform:              | PCWIN64  |

---

## Error in CTRL\_LO Substate in FB\_EXEC UTE state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:56:28             |
| End Time:    | 2019-Feb-03 15:56:46             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the CTRL\_LO substate of FB\_EXECUTE state if Error is detected.

### **Test Case Information**

Name: Error in CTRL\_LO Substate in FB\_EXECUTE state  
Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#24)  
Document: [local\\_sequencer\\_req.slreqx](#)



## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:56:31  |
| Simulation Stop Time:  | 2019-02-03 15:56:36  |
| Platform:              | PCWIN64  |

---

## Error in LATCH\_ADDR Substate in Write state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:56:46             |
| End Time:    | 2019-Feb-03 15:57:04             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the LATCH\_ADDR substate of Write state if Error is detected.

**Test Case Information**

Name: Error in LATCH\_ADDR Substate in Write state  
Type: Simulation Test

**Test Case Requirements**

Description: Transitions (local\_sequencer\_req#25)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:56:50  |
| Simulation Stop Time:  | 2019-02-03 15:56:55  |
| Platform:              | PCWIN64  |

---

## Error in CTRL\_HI Substate in Write state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:57:04             |
| End Time:    | 2019-Feb-03 15:57:23             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the CTRL\_HI substate of Write state if Error is detected.

### **Test Case Information**

Name: Error in CTRL\_HI Substate in Write state  
Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#25)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:57:08  |
| Simulation Stop Time:  | 2019-02-03 15:57:13  |
| Platform:              | PCWIN64  |

---

## Error in CTRL\_LO Substate in Write state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:57:23             |
| End Time:    | 2019-Feb-03 15:57:44             |
| Outcome:     | Passed                           |
| Description: |                                  |



Verify that Error state is entered from the CTRL\_LO substate of Write state if Error is detected.

**Test Case Information**

Name: Error in CTRL\_LO Substate in Write state  
Type: Simulation Test

**Test Case Requirements**

Description: Transitions (local\_sequencer\_req#25)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\Sympl<br>eVerification\Local_Sequencer\local_sequencer.s<br>lx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:57:26  |
| Simulation Stop Time:  | 2019-02-03 15:57:31  |
| Platform:              | PCWIN64  |

---

## Error in WRITE Substate in Write state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:57:44             |
| End Time:    | 2019-Feb-03 15:58:07             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the WRITE substate of Write state if Error is detected.

**Test Case Information**

Name: Error in WRITE Substate in Write state

Type: Simulation Test

**Test Case Requirements**

Description: Transitions (local\_sequencer\_req#25)

Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:57:48  |
| Simulation Stop Time:  | 2019-02-03 15:57:53  |
| Platform:              | PCWIN64  |

---

## Error in INCREMENT\_INST Substate in Write state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:58:07             |
| End Time:    | 2019-Feb-03 15:58:29             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the INCREMENT\_INST substate of Write state if Error is detected.

### **Test Case Information**

Name: Error in INCREMENT\_INST Substate in Write state  
Type: Simulation Test

### **Test Case Requirements**

Description: Transitions (local\_sequencer\_req#25)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |



## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:58:13  |
| Simulation Stop Time:  | 2019-02-03 15:58:19  |
| Platform:              | PCWIN64  |

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## Error in INST\_WAIT Substate in Write state

### Test Result Information

|              |                                  |
|--------------|----------------------------------|
| Result Type: | Test Case Result                 |
| Parent:      | <a href="#">New Test Suite 1</a> |
| Start Time:  | 2019-Feb-03 15:58:29             |
| End Time:    | 2019-Feb-03 15:58:49             |
| Outcome:     | Passed                           |
| Description: |                                  |

Verify that Error state is entered from the INST\_WAIT substate of Write state if Error is detected.

**Test Case Information**

Name: Error in INST\_WAIT Substate in Write state  
Type: Simulation Test

**Test Case Requirements**

Description: Transitions (local\_sequencer\_req#25)  
Document: [local\\_sequencer\\_req.slreqx](#)

## Verify Result

| Name  |
|---|
|  Test Assessment Block/Run:verify(task_done == 0)        |
|  Test Assessment Block/Run:verify(inst_ptr == 0)         |
|  Test Assessment Block/Run:verify(task_error == 0)       |
|  Test Assessment Block/Run:verify(latch_addr == 0)       |
|  Test Assessment Block/Run:verify(write == 0)            |
|  Test Assessment Block/Run:verify(ctrl == 0)             |
|  Test Assessment Block/Run:verify(abort == 0)            |
|  Test Assessment Block/Run:verify(fb_select == 0)        |
|  Test Assessment Block/step2:verify(task_done == 0)      |
|  Test Assessment Block/step2:verify(inst_ptr == 0)       |
|  Test Assessment Block/step2:verify(task_error == 0)     |
|  Test Assessment Block/step2:verify(latch_addr == 0)     |
|  Test Assessment Block/step2:verify(write == 0)          |
|  Test Assessment Block/step2:verify(ctrl == 0)           |
|  Test Assessment Block/step2:verify(abort == 0)         |
|  Test Assessment Block/step2:verify(fb_select == 42)   |
|  Test Assessment Block/step3:verify(task_done == 0)    |
|  Test Assessment Block/step3:verify(inst_ptr == 1)     |
|  Test Assessment Block/step3:verify(task_error == 0)   |
|  Test Assessment Block/step3:verify(latch_addr == 0)   |
|  Test Assessment Block/step3:verify(write == 0)        |
|  Test Assessment Block/step3:verify(ctrl == 0)         |
|  Test Assessment Block/step3:verify(abort == 0)        |
|  Test Assessment Block/step3:verify(fb_select == 42)   |
|  Test Assessment Block/step4:verify(task_done == 0)    |
|  Test Assessment Block/step4:verify(inst_ptr == 1)     |
|  Test Assessment Block/step4:verify(task_error == 0)   |
|  Test Assessment Block/step4:verify(latch_addr == 1)   |
|  Test Assessment Block/step4:verify(int32(addr) == 32) |
|  Test Assessment Block/step4:verify(write == 0)        |
|  Test Assessment Block/step4:verify(ctrl == 0)         |
|  Test Assessment Block/step4:verify(abort == 0)        |
|  Test Assessment Block/step4:verify(fb_select == 42)   |
|  Test Assessment Block/step5:verify(task_done == 0)    |
|  Test Assessment Block/step5:verify(inst_ptr == 1)     |
|  Test Assessment Block/step5:verify(task_error == 0)   |
|  Test Assessment Block/step5:verify(latch_addr == 0)   |
|  Test Assessment Block/step5:verify(write == 0)        |
|  Test Assessment Block/step5:verify(ctrl == 0)         |
|  Test Assessment Block/step5:verify(abort == 0)        |
|  Test Assessment Block/step5:verify(fb_select == 42)   |
|  Test Assessment Block/step6:verify(task_done == 0)    |

## Simulation

### System Under Test Information

|                        |  |
|------------------------|--|
| Model:                 | local_sequencer  |
| Harness:               | local_sequencer_Harness3   |
| Harness Owner:         | local_sequencer  |
| Simulation Mode:       | normal   |
| Configuration Set:     | Configuration1   |
| Start Time:            | 0  |
| Stop Time:             | 140  |
| Checksum:              | 1246428927 1032405156 113024743 3801906147   |
| Simulink Version:      | 9.2  |
| Model Version:         | 1.189  |
| Model Author:          | jayakumarav  |
| Date:                  | Sun Feb 03 00:17:14 2019   |
| User ID:               | jayakumarav  |
| Model Path:            | C:\Users\jayakumarav\Documents\GitHub\SympleVerification\Local_Sequencer\local_sequencer.slx |
| Machine Name:          | EGR-ELKS-05  |
| Solver Name:           | FixedStepDiscrete  |
| Solver Type:           | Fixed-Step   |
| Fixed Step Size:       | 1  |
| Simulation Start Time: | 2019-02-03 15:58:33  |
| Simulation Stop Time:  | 2019-02-03 15:58:38  |
| Platform:              | PCWIN64  |

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