

# Report Generated by Test Manager

**Title:** ControllerModeSelector REQ-Based Test  
S

**Author:**

**Date:** 22-Sep-2021 19:06:39

## Test Environment

Platform: PCWIN64  
MATLAB: (R2022a)

## Summary

Name

Outcome

Duration  
(Seconds)

[Results: 2021-Sep-22 19:06:21](#)

2  2 

10.201

 [ControllerModeSelector\\_Test](#)

2  2 

10.202

 [requirements\\_based\\_tests](#)



6.13

 [TC1](#)



6.13

 [interface\\_tests](#)



3.919

 [TC1](#)



3.92

 [fault\\_injection\\_tests](#)




0

 [TC1](#)



0

 [resource\\_usage\\_tests](#)



0

 [TC1](#)




0.00099993

## Results: 2021-Sep-22 19:06:21

Result Type: Result Set  
Parent: None  
Start Time: 22-Sep-2021 19:06:24  
End Time: 22-Sep-2021 19:06:34  
Outcome: Total: 4, Passed: 2, Disabled: 2

### Aggregated Coverage Results

Analyzed Model	Sim Mode	Complexity	Decision	Condition	Execution
 <a href="#">ControllerModeSelector</a>	Normal	4	100%	100%	100%

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## ControllerModeSelector\_Test

### Test Result Information

Result Type: Test File Result  
Parent: [Results: 2021-Sep-22 19:06:21](#)  
Start Time: 22-Sep-2021 19:06:24  
End Time: 22-Sep-2021 19:06:34  
Outcome: Total: 4, Passed: 2, Disabled: 2  
Description:

Model Version: 4.0

Model Last Modified On: 22-Sep-2021 18:13:09

Checksum when Compiled as Referenced Model: 2294784352 2520475279  
2926236726 1354712116

### Test Suite Information

Name: ControllerModeSelector\_Test

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## requirements\_based\_tests

### Test Result Information

Result Type: Test Suite Result  
Parent: [ControllerModeSelector Test](#)  
Start Time: 22-Sep-2021 19:06:24  
End Time: 22-Sep-2021 19:06:30  
Outcome: Total: 1, **Passed: 1**

### Test Suite Information

Name: requirements\_based\_tests  
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## TC1

### Test Result Information

Result Type: Test Case Result  
Parent: [requirements based tests](#)  
Start Time: 22-Sep-2021 19:06:24  
End Time: 22-Sep-2021 19:06:30  
Outcome: **Passed**

### Test Case Information

Name: TC1  
Type: Baseline Test  
Baseline Name: ReqBaseline.mat  
Baseline File: C:\Users\mabualqu\hlf2\ISO\_06\_09\_SwUVer\WPs\ISO\_6\_9\_5\_1\_SwVerSpec\ControllerModeSelector\ReqBaseline.mat

### Test Case Requirements

Description: SW\_HLF#7.3 Controller Mode Selection  
Document: SSRS.slreqx

### Baseline Comparison

Name	Abs T	Rel To	Lead T	Lag T	Max Di	Data Type 1	Units 1	Sample Time 1	Data Type 2	Units 2	Sample Time 2	Interp	Sync
	ol	l	ol	ol	ff			me 1			e 2		

✔ braking_switch	0	0	0	0	0	uint8				BrStatus		0.1	zoh	union
✔ AccelerationCmd:1	0	0	0	0	0	double	m/s^2	0.1		double	m/s^2	0.1	zoh	union

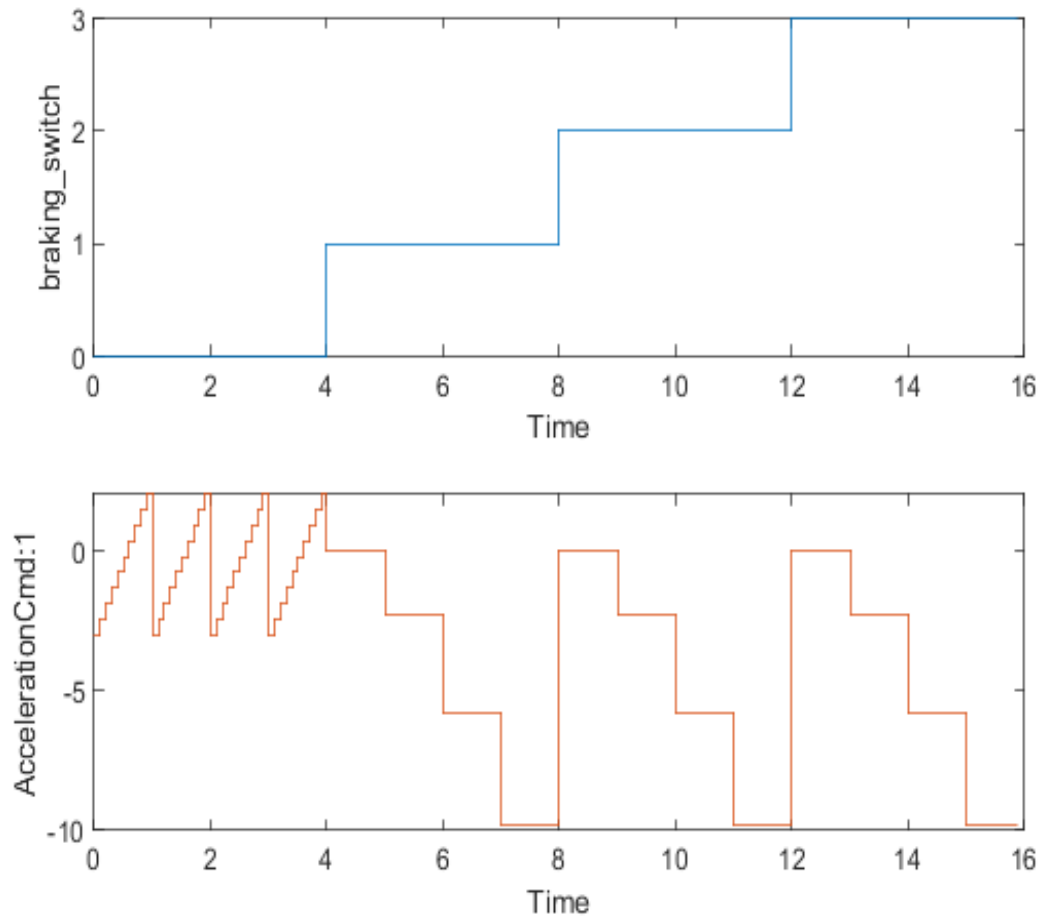
## ReqBaseline.mat

### Baseline Information

Baseline Name: ReqBaseline.mat  
Baseline File: C:\Users\mabualqu\hlf2\ISO\_06\_09\_SwUVer\WPs\ISO\_6\_9\_5\_1\_SwVerSpec\ControllerModeSelector\ReqBaseline.mat

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
braking_switch	uint8			zoh	union	<a href="#">Link</a>
AccelerationCmd:1	double	m/s^2	0.1	zoh	union	<a href="#">Link</a>

Name	Data Type	Units	Sample Time	Interp	Sync
braking_switch	uint8			zoh	union
AccelerationCmd:1	double	m/s^2	0.1	zoh	union



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## Input Data

### Input Information

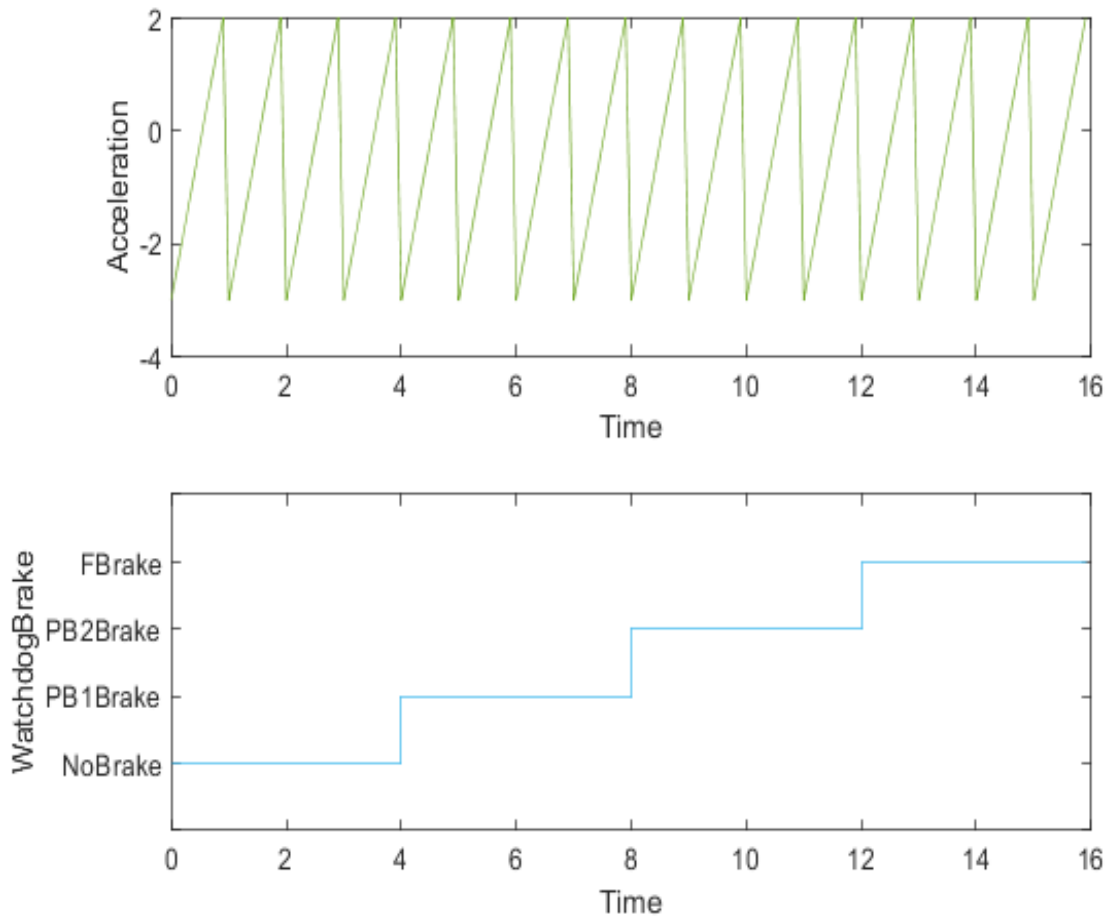
External Input      ReqInputData.mat

Name:

External Input File: C:\Users\mabualqu\hlf2\ISO\_06\_09\_SwUVer\WPs\ISO\_6\_9\_5\_1\_SwVerSpec\ControllerModeSelector\ReqInputData.mat

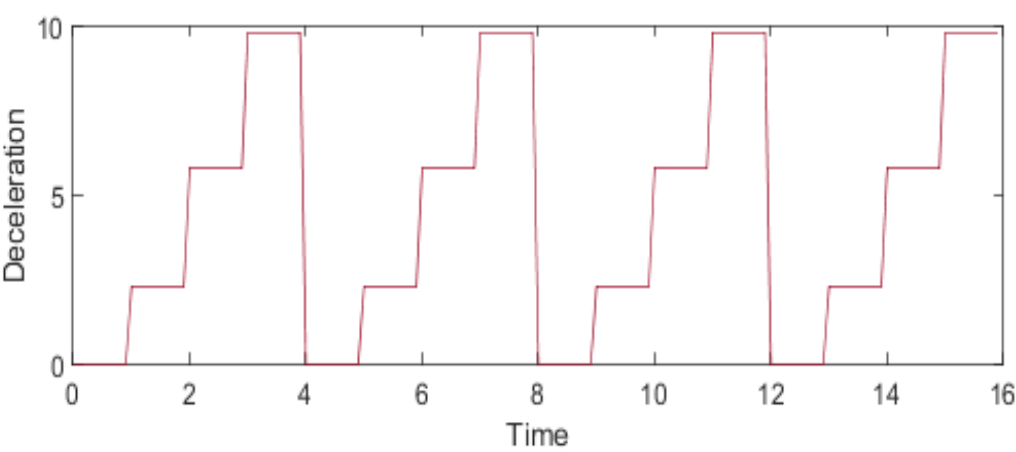
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
Acceleration	double		Continuous	linear	union	<a href="#">Link</a>
WatchdogBrake	BrStatus			zoh	union	<a href="#">Link</a>
Deceleration	double		Continuous	linear	union	<a href="#">Link</a>

Name	Data Type	Units	Sample Time	Interp	Sync
Acceleration	double		Continuous	linear	union
WatchdogBrake	BrStatus			zoh	union



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Name	Data Type	Units	Sample Time	Interp	Sync
Deceleration	double		Continuous	linear	union



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## Simulation

### System Under Test Information

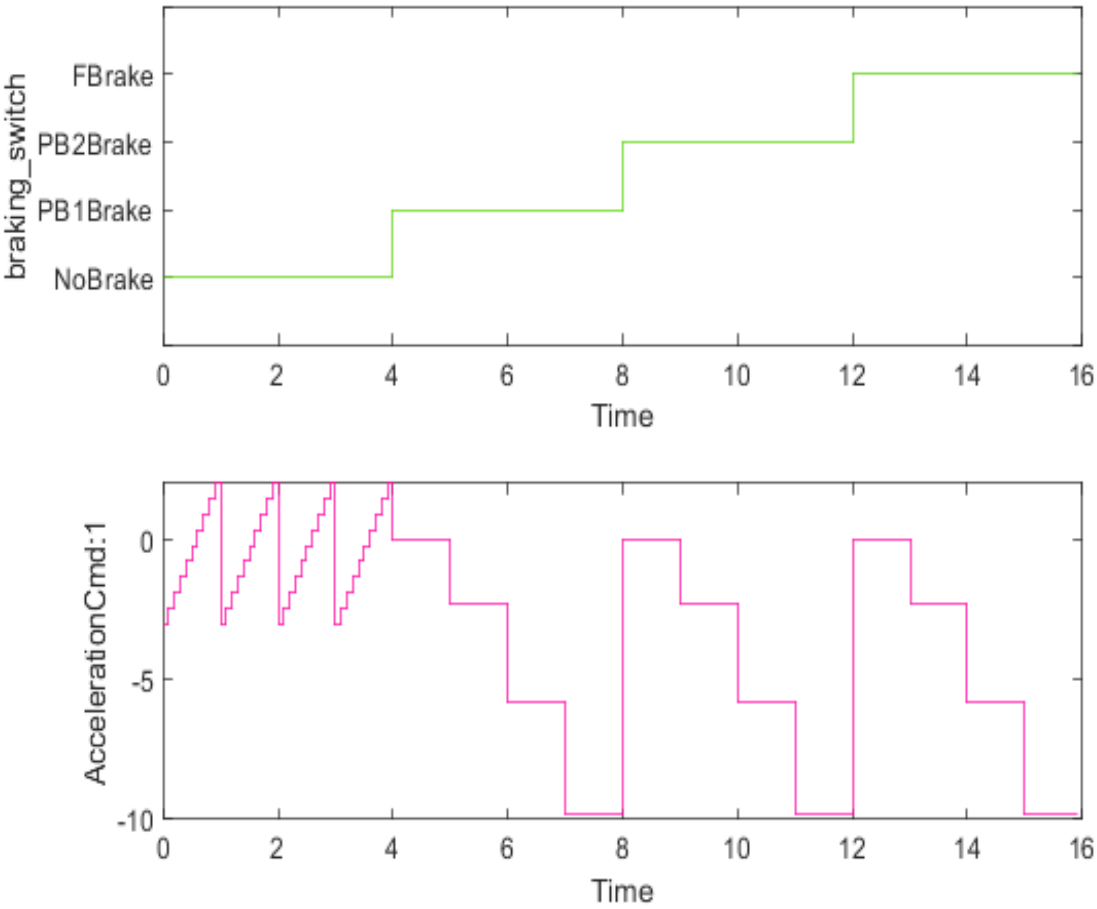
Model: ControllerModeSelector  
Harness: ControllerModeSelector\_Harness  
Harness Owner: ControllerModeSelector  
Release: Current  
Simulation Mode: normal  
Override SIL or PIL Mode: 0  
Configuration Set: csMultiInstance  
External Input Name: ReqInputData.mat  
External Input File: C:\Users\mabualqu\hlf2\ISO\_06\_09\_SwUVer\WPs\ISO\_6\_9\_5\_1\_SwVerSpec\ControllerModeSelector\ReqInputData.mat  
Start Time: 0  
Stop Time: 15.9  
Checksum: 1169674009 36874468 980624401 834964869  
Simulink Version: 10.4  
Model Version: 3.0  
Model Author: mabualqu  
Date: Wed Sep 22 18:13:11 2021  
User ID: mabualqu  
Model Path: C:\Users\mabualqu\hlf2\ISO\_06\_08\_SwU\WPs\ISO\_6\_8\_5\_1\_SwUnDesSpec\ControllerModeSelector\ControllerModeSelector\_Harness.slx  
Machine Name: BAT917931WIN64  
Solver Name: FixedStepDiscrete  
Solver Type: Fixed-Step  
Fixed Step Size: 0.10000000000000001  
Simulation Start Time: 2021-09-22 19:06:24  
Simulation Stop Time: 2021-09-22 19:06:26  
Platform: PCWIN64

### Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
braking_switch	BrStatus		0.1	zoh	union	<a href="#">Link</a>

AccelerationCmd:1	double	m/s^2	0.1	zoh	union	<a href="#">Link</a>
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Name	Data Type	Units	Sample Time	Interp	Sync
braking_switch	BrStatus		0.1	zoh	union
AccelerationCmd:1	double	m/s^2	0.1	zoh	union



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Simulation Logs:

Simulation stopped at '15.9' because there is no input data after this time point.

Symbol 'BusMultiObjectTracker' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'BusMultiObjectTrackerTracks' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'BusRadarDetectionsObjectAttributes' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'BusVehiclePose' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'LaneSensor' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'LaneSensorBoundaries' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'Ts' is defined in [DD\\_HLF\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_Configuration.sldd](#) is used.

Symbol 'max\_ac' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

Symbol 'max\_dc' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

Symbol 'tau' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

Symbol 'tau2' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

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## interface\_tests

### Test Result Information

Result Type: Test Suite Result  
Parent: [ControllerModeSelector\\_Test](#)  
Start Time: 22-Sep-2021 19:06:30  
End Time: 22-Sep-2021 19:06:34  
Outcome: Total: 1, **Passed: 1**

### Test Suite Information

Name: interface\_tests

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## TC1



### Test Result Information

Result Type: Test Case Result  
Parent: [interface\\_tests](#)  
Start Time: 22-Sep-2021 19:06:30  
End Time: 22-Sep-2021 19:06:34  
Outcome: **Passed**

### Test Case Information

Name: TC1  
Type: Baseline Test  
Baseline Name: InterfaceBaseline.mat  
Baseline File: C:\Users\mabualqu\hlf2\ISO\_06\_09\_SwUVer\WPs\ISO\_6\_9\_5\_1\_SwVerSpec\ControllerModeSelector\InterfaceBaseline.mat

Baseline Comparison

Name	Abs Tol	Rel Tol	Lead Tol	Lag Tol	Max Diff	Data Type 1	Units 1	Sample Time 1	Data Type 2	Units 2	Sample Time 2	Interp	Sync
 braking_switch	0	0	0	0	0	BrStatus		0.1	BrStatus		0.1	zoh	union
 AccelerationCmd:1	0	0	0	0	0	double	m/s^2	0.1	double	m/s^2	0.1	zoh	union

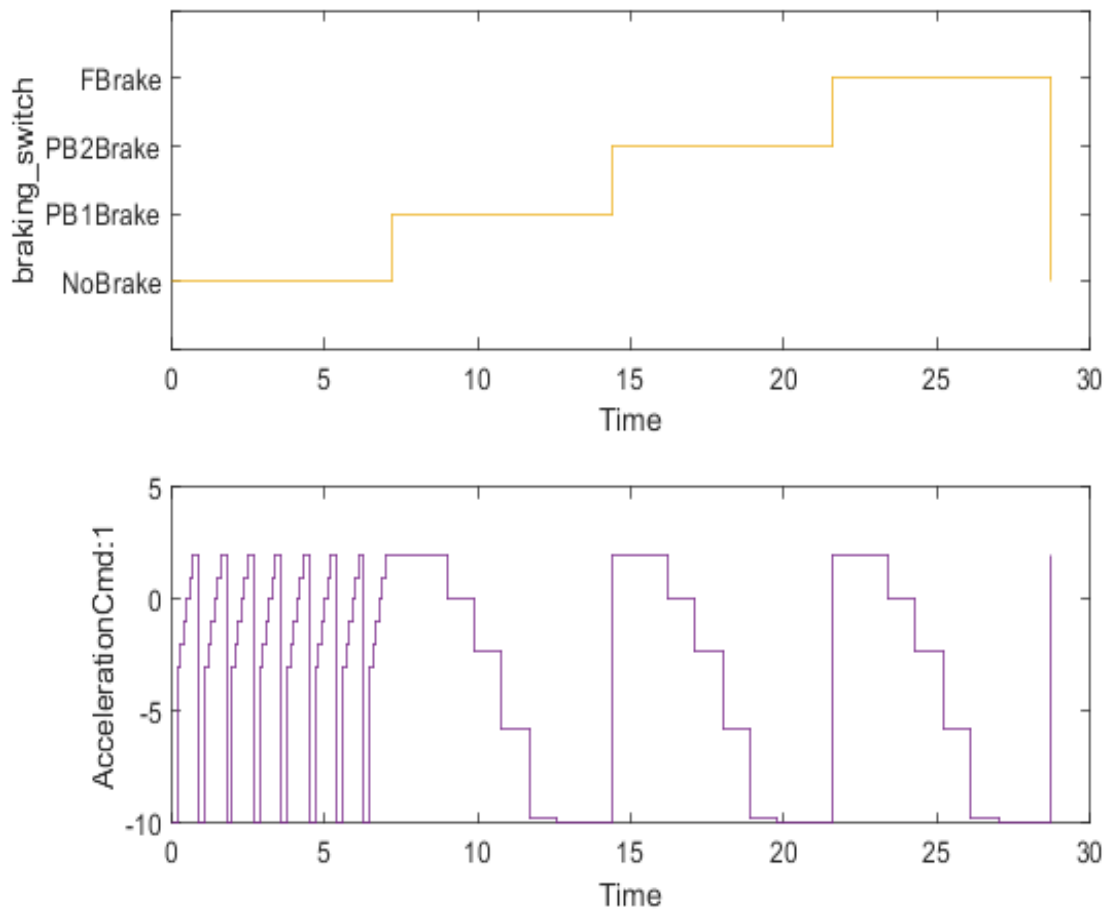
InterfaceBaseline.mat

Baseline Information

Baseline Name: InterfaceBaseline.mat  
Baseline File: C:\Users\mabualqu\hlf2\ISO\_06\_09\_SwUVer\WPs\ISO\_6\_9\_5\_1\_SwVerSpec\ControllerModeSelector\InterfaceBaseline.mat

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
braking_switch	BrStatus		0.1	zoh	union	<a href="#">Link</a>
AccelerationCmd:1	double	m/s^2	0.1	zoh	union	<a href="#">Link</a>

Name	Data Type	Units	Sample Time	Interp	Sync
braking_switch	BrStatus		0.1	zoh	union
AccelerationCmd:1	double	m/s^2	0.1	zoh	union



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## Input Data

### Input Information

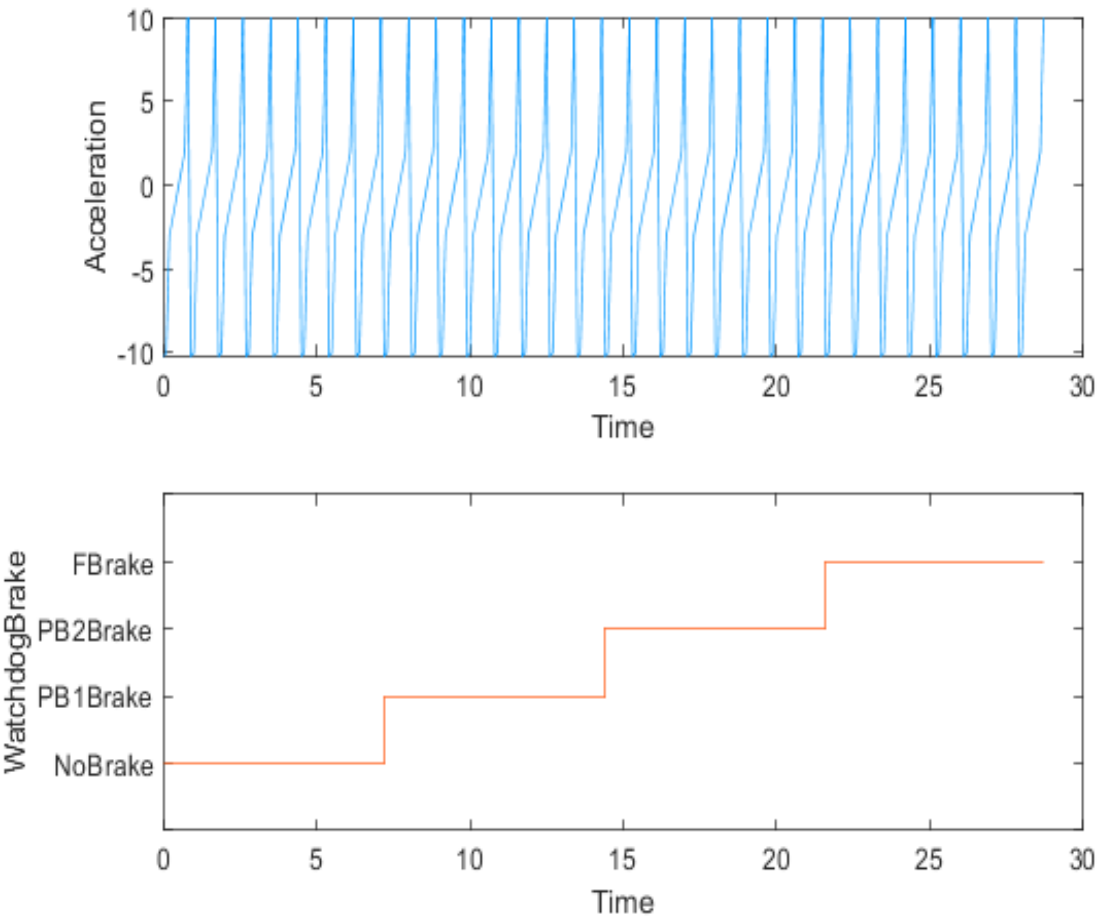
External Input      InterfaceInputData.mat

Name:

External Input File: C:\Users\mabualqu\hlf2\ISO\_06\_09\_SwUVer\WPs\ISO\_6\_9\_5\_1\_SwVerSpec\ControllerModeSelector\InterfaceInputData.mat

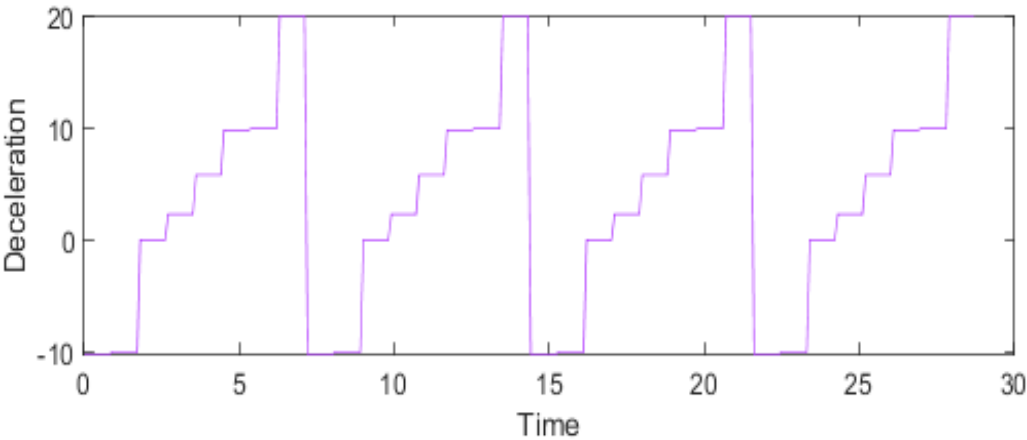
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
Acceleration	double		Continuous	linear	union	<a href="#">Link</a>
WatchdogBrake	BrStatus			zoh	union	<a href="#">Link</a>
Deceleration	double		Continuous	linear	union	<a href="#">Link</a>

Name	Data Type	Units	Sample Time	Interp	Sync
Acceleration	double		Continuous	linear	union
WatchdogBrake	BrStatus			zoh	union



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Name	Data Type	Units	Sample Time	Interp	Sync
Deceleration	double		Continuous	linear	union



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## Simulation

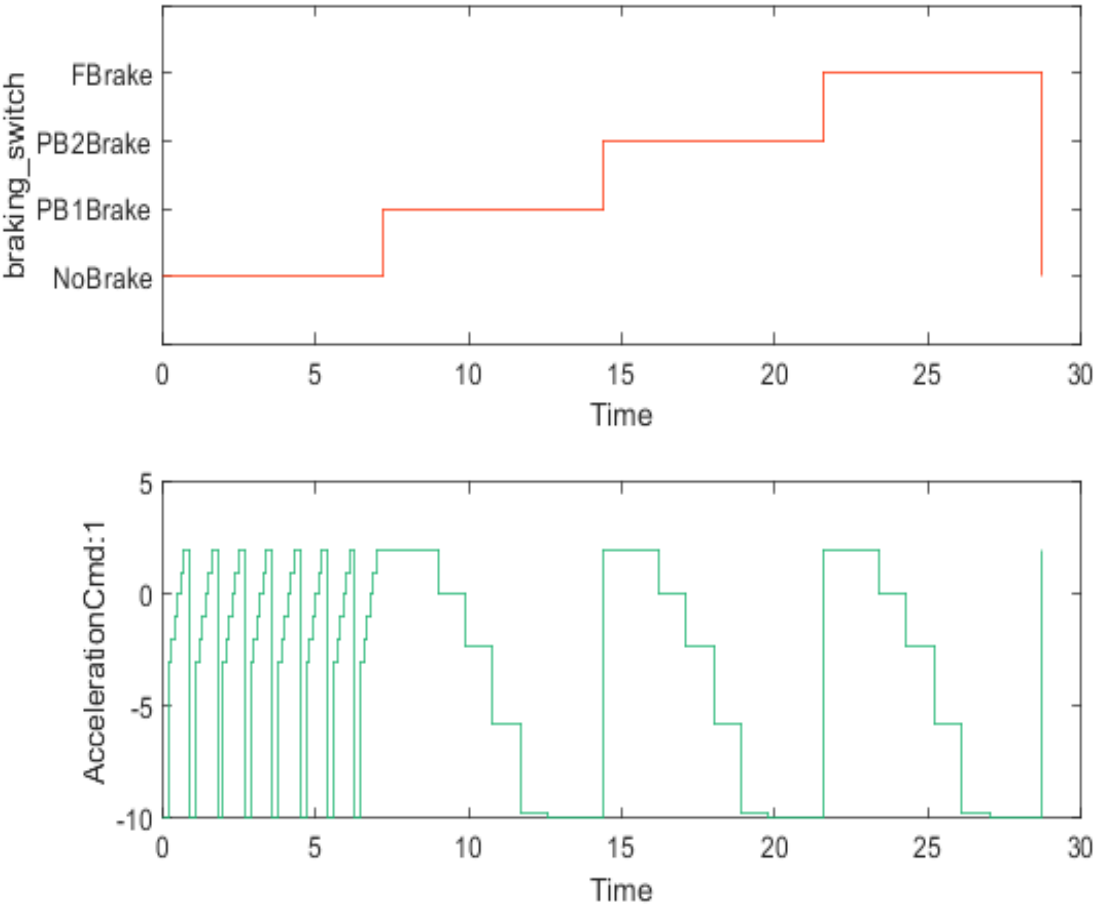
### System Under Test Information

Model:	ControllerModeSelector
Harness:	ControllerModeSelector_Harness
Harness Owner:	ControllerModeSelector
Release:	Current
Simulation Mode:	normal
Override SIL or PIL Mode:	0
Configuration Set:	C:\Users\mabualqu\hlf2\ISO_06_09_SwUVer\WPs\ISO_6_9_5_1_SwVerSpec\ControllerModeSelector\csMultiInstanceInterface.mat
External Input Name:	InterfaceInputData.mat
External Input File:	C:\Users\mabualqu\hlf2\ISO_06_09_SwUVer\WPs\ISO_6_9_5_1_SwVerSpec\ControllerModeSelector\InterfaceInputData.mat
Start Time:	0
Stop Time:	28.700000000000003
Checksum:	634788924 3835229932 155062810 554342077
Simulink Version:	10.4
Model Version:	3.0
Model Author:	mabualqu
Date:	Wed Sep 22 18:13:11 2021
User ID:	mabualqu
Model Path:	C:\Users\mabualqu\hlf2\ISO_06_08_SwU\WPs\ISO_6_8_5_1_SwUnDesSpec\ControllerModeSelector\ControllerModeSelector_Harness.slx
Machine Name:	BAT917931WIN64
Solver Name:	FixedStepDiscrete
Solver Type:	Fixed-Step
Fixed Step Size:	0.10000000000000001
Simulation Start Time:	2021-09-22 19:06:31
Simulation Stop Time:	2021-09-22 19:06:33
Platform:	PCWIN64

### Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
braking_switch	BrStatus		0.1	zoh	union	<a href="#">Link</a>
AccelerationCmd:1	double	m/s^2	0.1	zoh	union	<a href="#">Link</a>

Name	Data Type	Units	Sample Time	Interp	Sync
braking_switch	BrStatus		0.1	zoh	union
AccelerationCmd:1	double	m/s^2	0.1	zoh	union



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Simulation Logs:

Simulation stopped at '28.699999999999999' because there is no input data after this time point.

Symbol 'BusMultiObjectTracker' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'BusMultiObjectTrackerTracks' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'BusRadarDetectionsObjectAttributes' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'BusVehiclePose' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'LaneSensor' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'LaneSensorBoundaries' is defined in [DD\\_HLF\\_DataTypes.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_DataTypes.sldd](#) is used.

Symbol 'Ts' is defined in [DD\\_HLF\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_HLF\\_Configuration.sldd](#) is used.

Symbol 'max\_ac' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

Symbol 'max\_dc' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

Symbol 'tau' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

Symbol 'tau2' is defined in [DD\\_PFC\\_Configuration.sldd](#) and [base workspace](#). The definition in [DD\\_PFC\\_Configuration.sldd](#) is used.

Inconsistent numeric values for port 1 of '[ControllerModeSelector Harness/ Acceleration](#)': Output value (-10.2) at major time step 0 is less than minimum (-4) from '[ControllerModeSelector Harness/ControllerModeSelector](#)'

Inconsistent numeric values for port 1 of '[ControllerModeSelector Harness/ Deceleration](#)': Output value (-10.2) at major time step 0 is less than minimum (0) from '[ControllerModeSelector Harness/ControllerModeSelector](#)'

Inconsistent numeric values for port 1 of '[ControllerModeSelector Harness/ Acceleration](#)': Output value (10) at major time step 0.8 is greater than maximum (2) from '[ControllerModeSelector Harness/ControllerModeSelector](#)'

Inconsistent numeric values for port 1 of '[ControllerModeSelector Harness/ Deceleration](#)': Output value (10) at major time step 5.4 is greater than maximum (9.8) from '[ControllerModeSelector Harness/ControllerModeSelector](#)'

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## **fault\_injection\_tests**

### **Test Result Information**

Result Type:	Test Suite Result
Parent:	<a href="#">ControllerModeSelector Test</a>
Start Time:	22-Sep-2021 19:06:21
End Time:	22-Sep-2021 19:06:21
Outcome:	Total: 1, Disabled: 1

### **Test Suite Information**

Name:	fault_injection_tests
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## TC1

### Test Result Information

Result Type: Test Case Result  
Parent: [fault injection tests](#)  
Start Time: 22-Sep-2021 19:06:21  
End Time: 22-Sep-2021 19:06:21  
Outcome: Disabled

### Test Case Information

Name: TC1  
Type: Baseline Test

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## resource\_usage\_tests

### Test Result Information

Result Type: Test Suite Result  
Parent: [ControllerModeSelector\\_Test](#)  
Start Time: 22-Sep-2021 19:06:21  
End Time: 22-Sep-2021 19:06:21  
Outcome: Total: 1, Disabled: 1

### Test Suite Information

Name: resource\_usage\_tests

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## TC1

### Test Result Information

Result Type: Test Case Result

Parent: [resource usage tests](#)  
Start Time: 22-Sep-2021 19:06:21  
End Time: 22-Sep-2021 19:06:21  
Outcome: Disabled

### **Test Case Information**

Name: TC1  
Type: Baseline Test

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