

Report Generated by Test Manager

Title: ControllerModeSelector INSTR SIL REQ
 -Based Tests






















Author:

Date: 22-Sep-2021 19:10:25

Test Environment

Platform: PCWIN64
MATLAB: (R2022a)


Summary

Name	Outcome	Duration (Seconds)
Results: 2021-Sep-22 19:07:35	2  2 	163.518
 ControllerModeSelector_Test	2  2 	163.516
 requirements_based_tests		147.064
 TC1		147.062
 interface_tests		16.287
 TC1		16.288
 fault_injection_tests		0
 TC1		0
 resource_usage_tests		0
 TC1		0

Results: 2021-Sep-22 19:07:35

Result Type: Result Set
Parent: None
Start Time: 22-Sep-2021 19:07:36
End Time: 22-Sep-2021 19:10:20
Outcome: Total: 4, Passed: 2, Disabled: 2

Aggregated Coverage Results

Analyzed Model	Sim Mode	Complexity	Decision	Function	Execution
 ControllerModeSelector	ModelRefSIL4		100%	100%	100%

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ControllerModeSelector_Test

Test Result Information

Result Type: Test File Result
Parent: [Results: 2021-Sep-22 19:07:35](#)
Start Time: 22-Sep-2021 19:07:36
End Time: 22-Sep-2021 19:10:20
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

Verified Code Files Checksum: 7B0A46A4A41BC7341D21F05322EA35D9

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 19:07:36
End Time: 22-Sep-2021 19:10:03
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 19:07:36
End Time: 22-Sep-2021 19:10:03
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 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	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

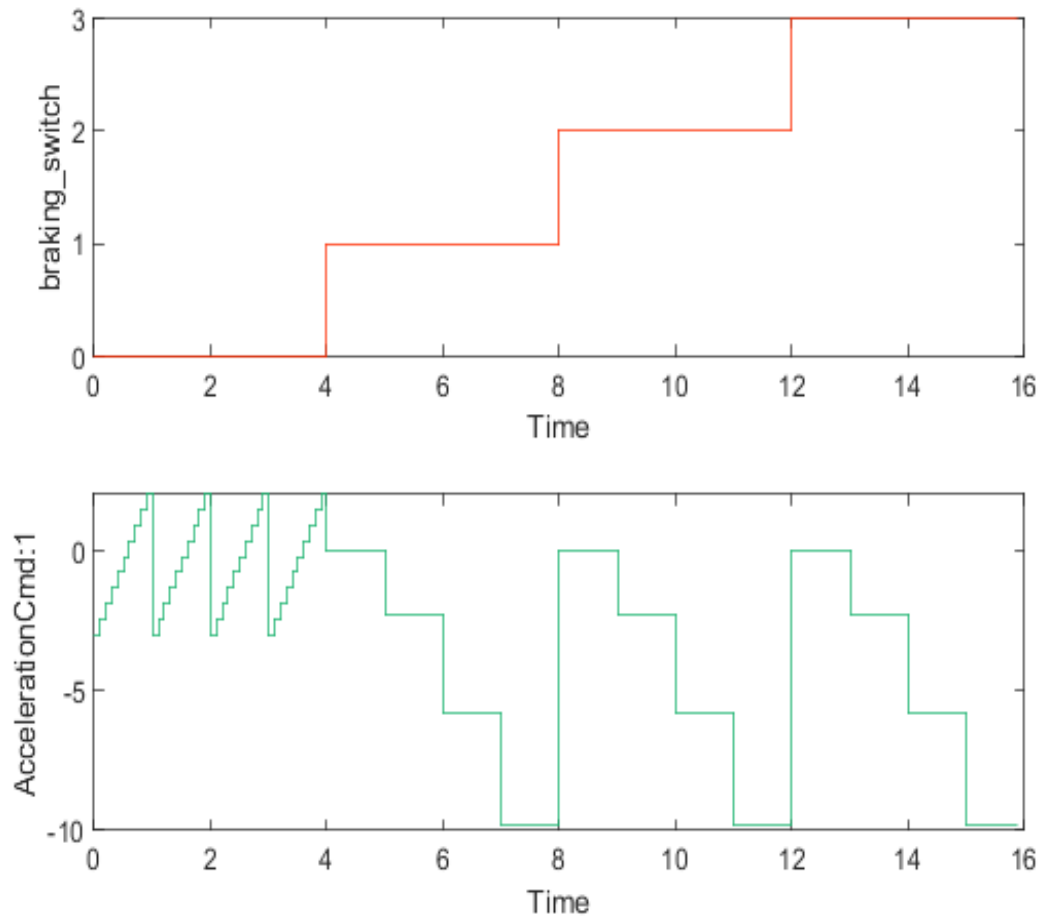
Baseline Information

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	Link
AccelerationCmd:1	double	m/s^2	0.1	zoh	union	Link

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

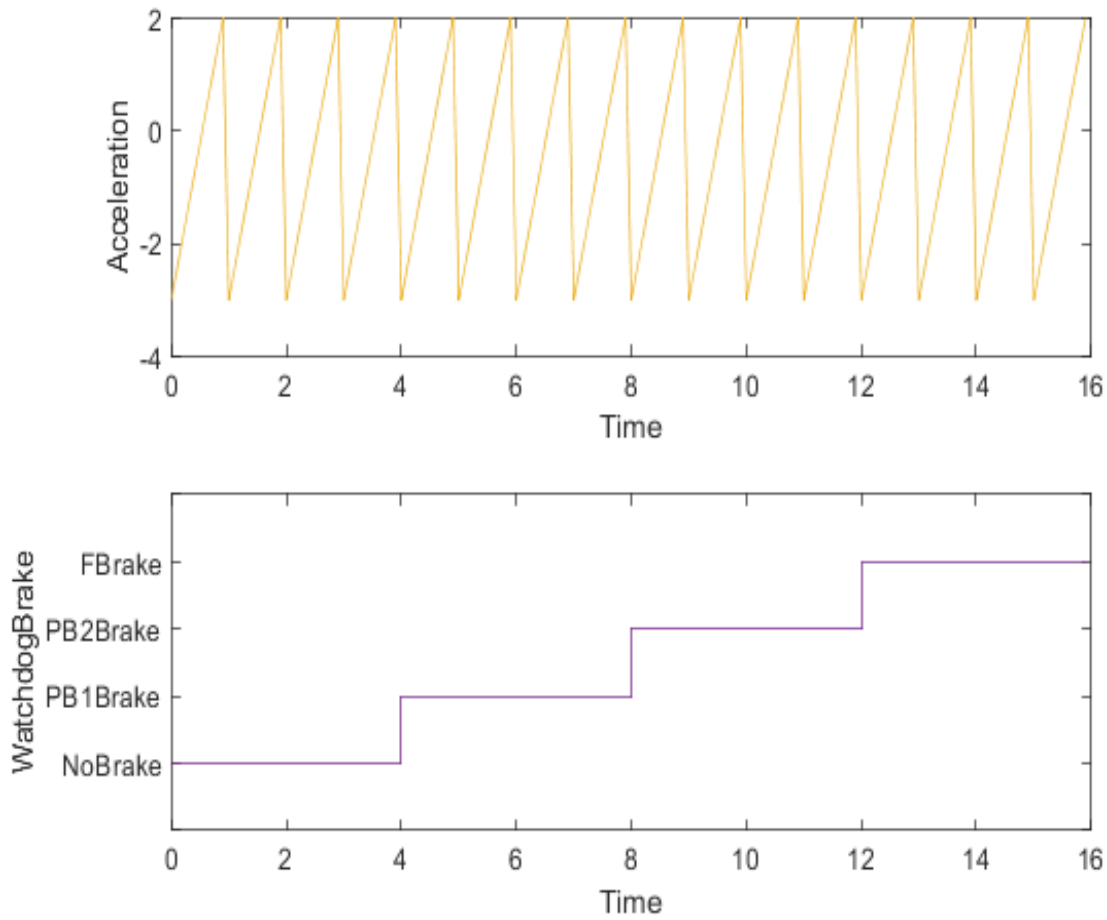
External Input ReqInputData.mat

Name:

External Input File: C:\Users\mabualqu\hlf2\ISO_06_09_SwUVer\WPs\ISO_6_9_5_1_SwVerSpec\ControllerModeSelector\ReqInputData.mat

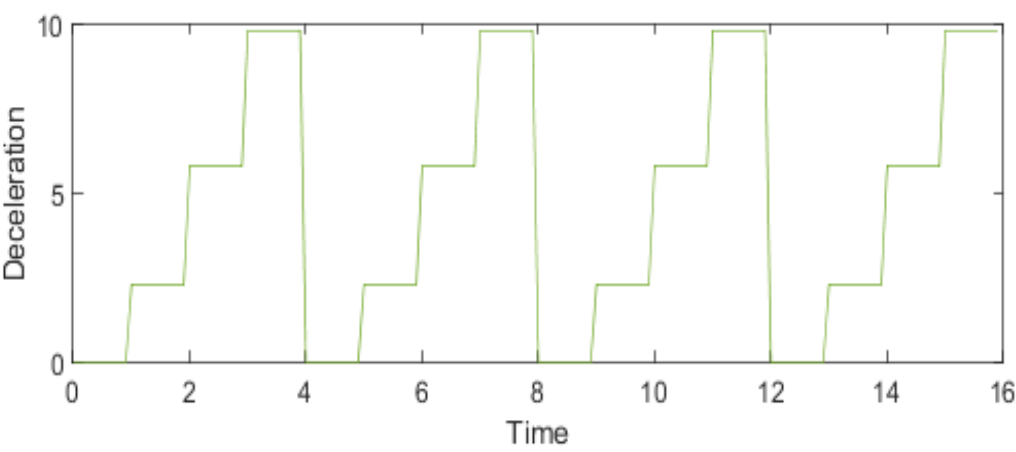
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
Acceleration	double		Continuous	linear	union	Link
WatchdogBrake	BrStatus			zoh	union	Link
Deceleration	double		Continuous	linear	union	Link

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

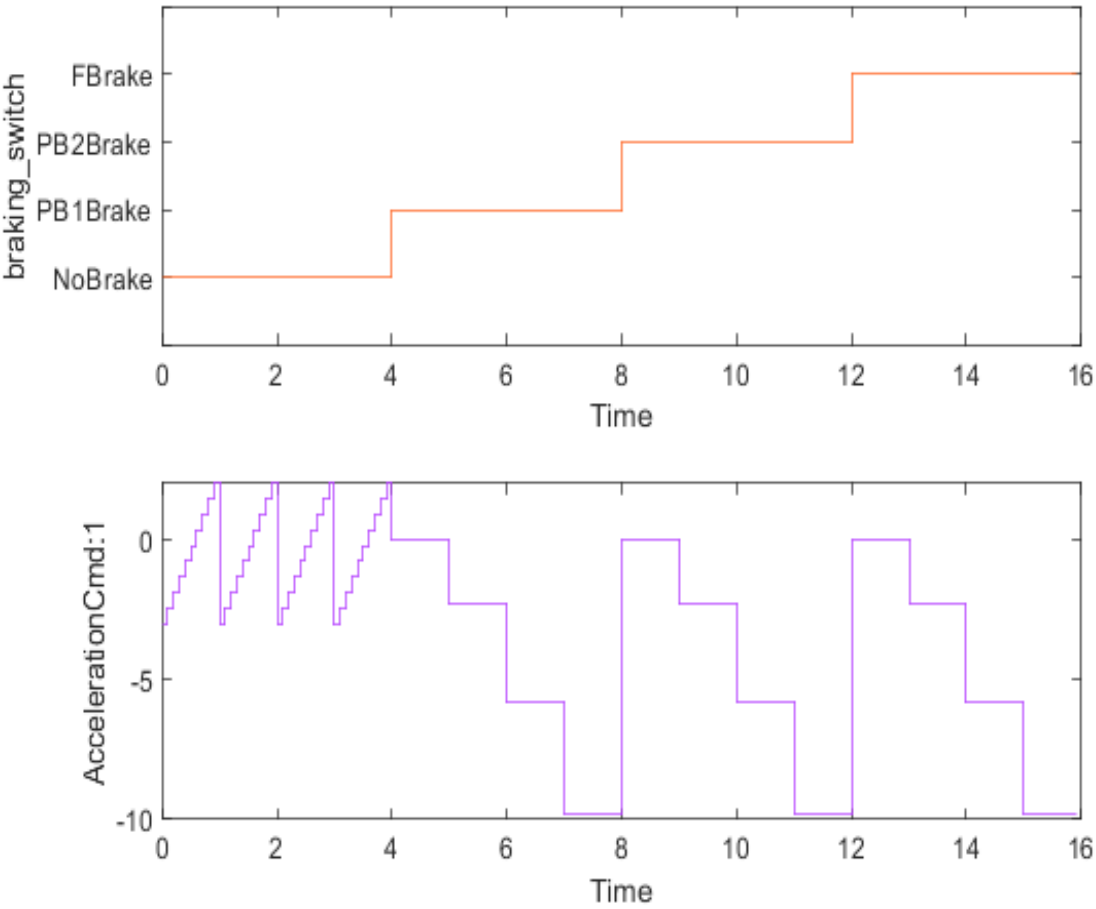
Model: ControllerModeSelector
Harness: ControllerModeSelector_Harness
Harness Owner: ControllerModeSelector
Release: Current
Simulation Mode: software-in-the-loop (sil)
Override SIL or PIL Mode: 0
Configuration Set: csMultiInstance
External Input Name: ReqInputData.mat
External Input File: C:\Users\mabualqu\hlf2\ISO_06_09_SwUVer\WPs\ISO_6_9_5_1_SwVerSpec\ControllerModeSelector\ReqInputData.mat
Start Time: 0
Stop Time: 15.9
Checksum: 772502031 1335336350 81022244 2542414531
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 19:07:36
Simulation Stop Time: 2021-09-22 19:10:00
Platform: PCWIN64

Simulation Output

Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
braking_switch	BrStatus		0.1	zoh	union	Link

AccelerationCmd:1	double	m/s^2	0.1	zoh	union	Link
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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 19:10:03
End Time: 22-Sep-2021 19:10:20
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 19:10:03
End Time: 22-Sep-2021 19:10:20
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

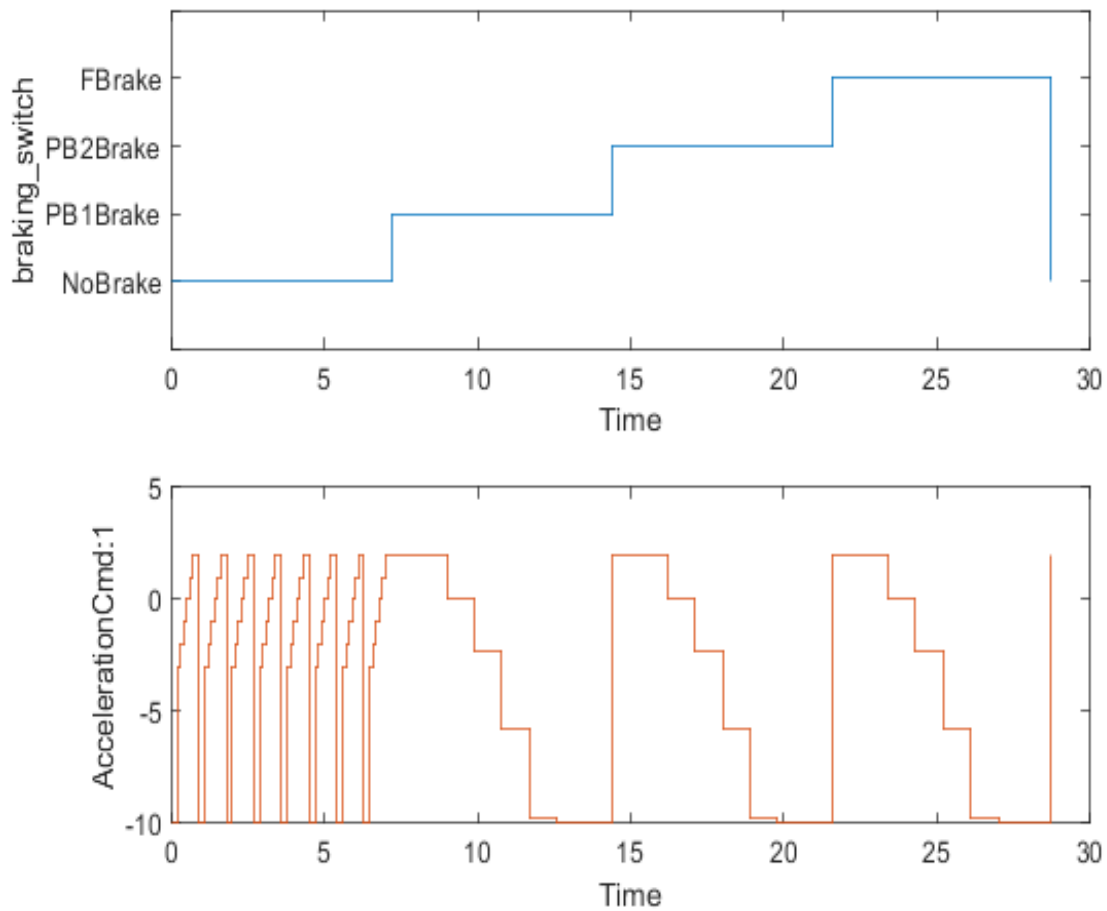
InterfaceBaseline.mat

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	Link
AccelerationCmd:1	double	m/s^2	0.1	zoh	union	Link

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

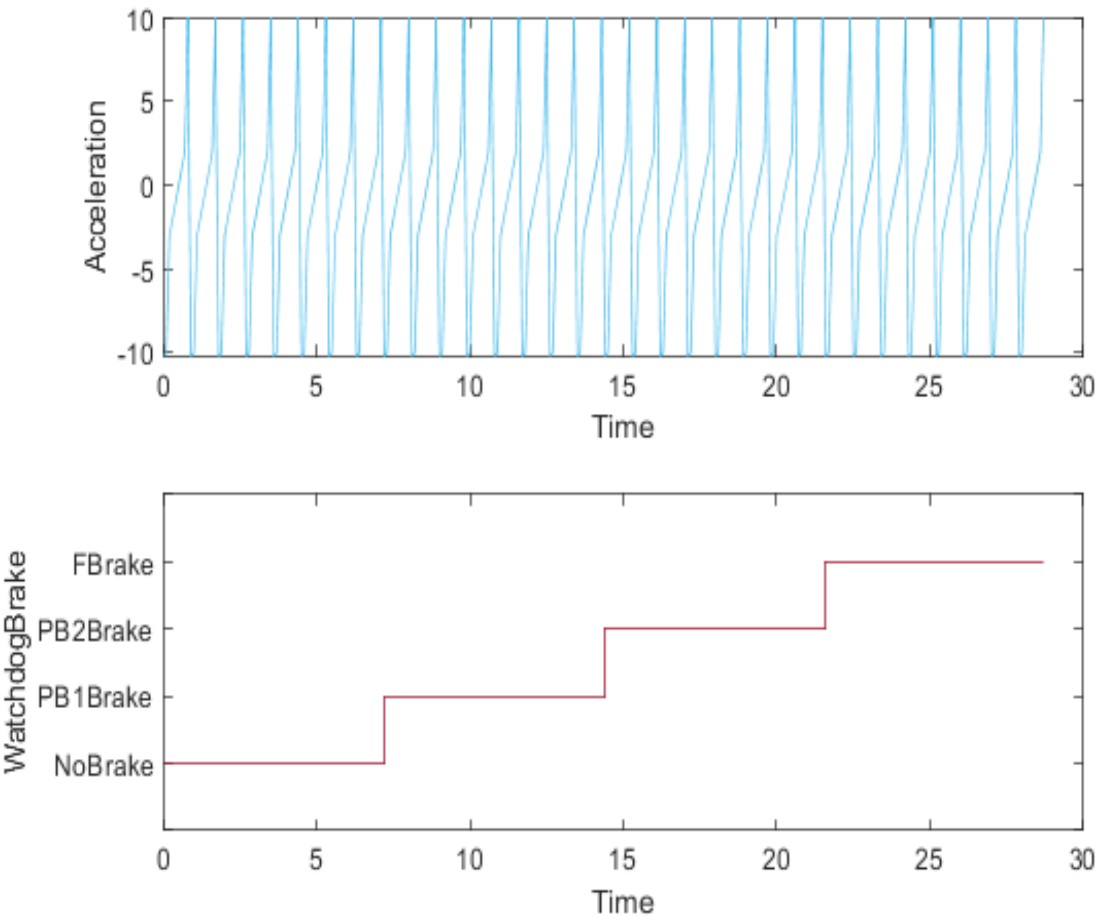
External Input InterfaceInputData.mat

Name:

External Input File: C:\Users\mabualqu\hlf2\ISO_06_09_SwUVer\WPs\ISO_6_9_5_1_SwVerSpec\ControllerModeSelector\InterfaceInputData.mat

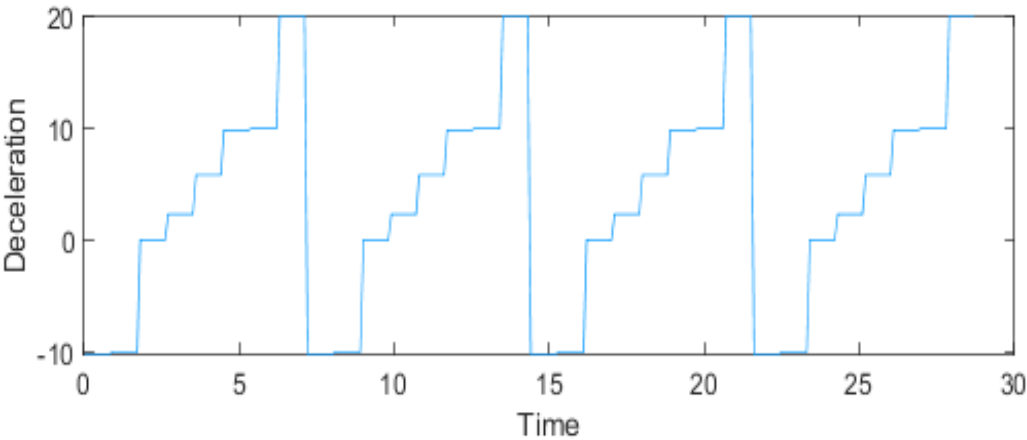
Name	Data Type	Units	Sample Time	Interp	Sync	Link to Plot
Acceleration	double		Continuous	linear	union	Link
WatchdogBrake	BrStatus			zoh	union	Link
Deceleration	double		Continuous	linear	union	Link

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

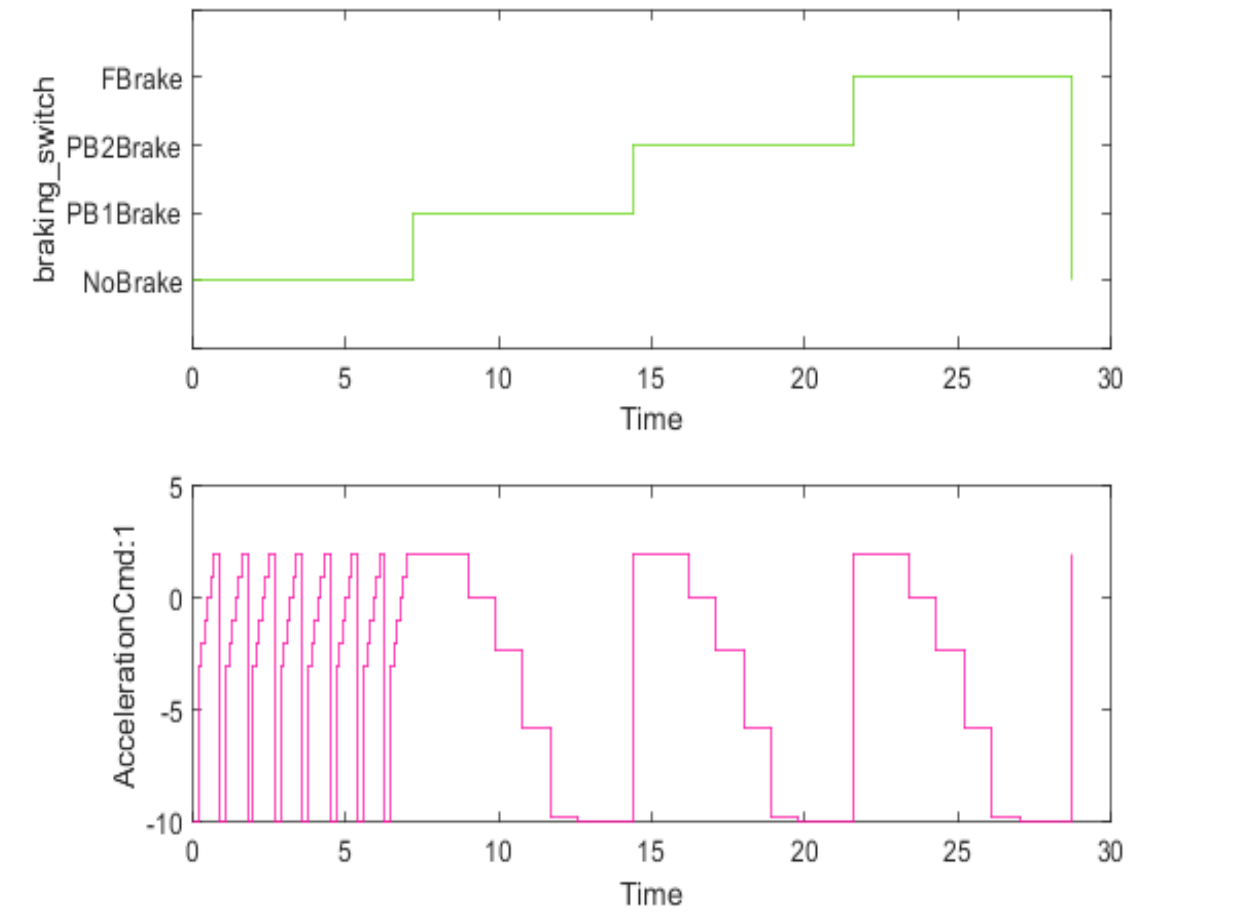
System Under Test Information

Model:	ControllerModeSelector
Harness:	ControllerModeSelector_Harness
Harness Owner:	ControllerModeSelector
Release:	Current
Simulation Mode:	software-in-the-loop (sil)
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:	3782929277 197896349 633174502 4292712923
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 19:10:04
Simulation Stop Time:	2021-09-22 19:10:17
Platform:	PCWIN64

Simulation Output

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

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:	ControllerModeSelector Test
Start Time:	22-Sep-2021 19:07:35
End Time:	22-Sep-2021 19:07:35
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 19:07:35
End Time: 22-Sep-2021 19:07:35
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 19:07:35
End Time: 22-Sep-2021 19:07:35
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 19:07:35
End Time: 22-Sep-2021 19:07:35
Outcome: Disabled

Test Case Information

Name: TC1
Type: Baseline Test

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