Model Advisor Report – ABS_v1.slx

Simulink version: 10.5 **Model version:** 1.18

System: ABS_v1 **Current run:** 26-Mar-2022 16:46:47

Treat as Referenced Model: off

Run Summary

Incomplete	Failed	Warning	Justified	Passed	Not Run	Total
0	0	14	0	61	118	193

Model Advisor

By Product 0 0 0 0 0 118

Embedded Coder 0 0 0 0 0 28

Identify lookup table blocks that generate expensive out-of-range checking code

Not Run

Check configuration parameters for generation of inefficient saturation code

Not Run

Check for blocks not recommended for C/C++ production code deployment

Not Run

Check output types of logic blocks

Not Run

Check the hardware implementation

Not Run

Identify questionable software environment specifications

Not Run

Identify questionable code instrumentation (data I/O)

Not Run

Identify blocks generating inefficient algorithms

Not Run

Check configuration parameters for MISRA C:2012

Not Run

Check for blocks not recommended for MISRA C:2012

Not Run

Check for unsupported block names

Not Run

Check usage of Assignment blocks

Not Run

Check for switch case expressions without a default case

Not Run

Check for missing error ports in AUTOSAR receiver interfaces

Not Run

Check configuration parameters for secure coding standards

Not Run

Check for blocks not recommended for secure coding standards

Not Run

Identify questionable subsystem settings

Not Run

Check for blocks not supported for row-major code generation

Not Run

Identify TLC S-Functions with unset array layout

Not Run

Identify blocks that generate expensive fixed-point and saturation code

Not Run

Check for missing const qualifiers in model functions

Not Run

Check bus object names that are used as bus element names

Not Run

Identify questionable fixed-point operations

Not Run

Identify blocks that generate expensive rounding code

Not Run

Check for bitwise operations on signed integers

Not Run

Check for recursive function calls

Not Run

Check for equality and inequality operations on floating-point values

Not Run

Check integer word lengths

Not Run

Simulink 0 0 0 0 0 42

Check optimization settings

Not Run

Identify unconnected lines, input ports, and output ports

Not Run

Check root model Inport block specifications

Not Run

Check diagnostic settings ignored during accelerated model reference simulation

Not Run

Check for parameter tunability information ignored for referenced models

Not Run

Check for implicit signal resolution

Not Run

Check for optimal bus virtuality

Not Run

Check for calls to slDataTypeAndScale()

Not Run

Check for Discrete-Time Integrator blocks with initial condition uncertainty

Not Run

Identify disabled library links

Not Run

Identify parameterized library links

Not Run

Identify unresolved library links

Not Run

Identify configurable subsystem blocks in the model for converting to variant subsystem blocks.

Not Run

Check usage of function-call connections

Not Run

Check and update mask image display commands with unnecessary imread() function calls

Not Run

Check and update mask to affirm icon drawing commands dependency on mask workspace

Not Run

Identify Environment Controller blocks to be replaced with Variant Source blocks

Not Run

Runtime diagnostics for S-functions

Not Run

Check if Read/Write diagnostics are enabled for Data Store blocks

Not Run

Check Data Store Memory blocks for multitasking, strong typing, and shadowing issues

Not Run

Check Model History properties

Not Run

Check S-functions in the model

Not Run

Open the Upgrade Advisor

Not Run

Check structure parameter usage with bus signals

Not Run

Check for large number of function arguments from virtual bus across model reference boundary

Not Run

Check Delay, Unit Delay and Zero-Order Hold blocks for rate transition

Not Run

Check bus signals treated as vectors

Not Run

Check for potentially delayed function-call block return values

Not Run

Identify block output signals with continuous sample time and non-floating point data type

Not Run

Check usage of Merge blocks

Not Run

Check usage of Outport blocks

Not Run

Check usage of Discrete-Time Integrator blocks

Not Run

Check model settings for migration to simplified initialization mode

Not Run

Check for non-continuous signals driving derivative ports

Not Run

Check data store block sample times for modeling errors

Not Run

Check for potential ordering issues involving data store access

Not Run

Identify unit mismatches in the model

Not Run

Identify automatic unit conversions in the model

Not Run

Identify disallowed unit systems in the model

Not Run

Identify undefined units in the model

Not Run

Identify ambiguous units in the model

Not Run

Identify questionable operations for strict single-precision design

Not Run

Simulink Coder 0 0 0 0 0 9

Identify blocks using one-based indexing

Not Run

Check solver for code generation

Not Run

Check for blocks not supported by code generation

Not Run

Check for model reference configuration mismatch

Not Run

Check code generation identifier formats used for model reference

Not Run

Check for relative execution order change for Data Store Read and Data Store Write blocks

Not Run

Check reuse of subsystem code

Not Run

Check sample times and tasking mode

Not Run

Check for blocks that have constraints on tunable parameters

Not Run

HDL Coder 0 0 0 0 0 36

Checks for blocks and block settings *0 0 0 0 0 10*

Check for unsupported blocks

Not Run

Check for HDL Reciprocal block usage

Not Run

Check for MATLAB Function block settings

Not Run

Check for obsolete Unit Delay Enabled/Resettable blocks

Not Run

Check for infinite and continuous sample time sources

Not Run

Check for unsupported storage class for signal objects

Not Run

Check for Stateflow chart settings

Not Run

Check for Trigonometric Function block for LUT-based approximation method

Not Run

Check for large matrix operations

Not Run

Check for blocks that have nonzero output latency

Not Run

Industry standard checks 0 0 0 0 0 11

Check architecture name

Not Run

Check clock settings

Not Run

Check clock, reset, and enable signals

Not Run

Check file extension

Not Run

Check generics

Not Run

Check naming conventions

Not Run

Check package file names

Not Run

Check signal and port names

Not Run

Check entity and architecture

Not Run

Check module/entity names

Not Run

Check top-level subsystem/port names

Not Run

Model configuration checks 0 0 0 0 0 6

Check delay balancing setting

Not Run

Check for global reset setting for Xilinx and Altera devices

Not Run

Check inline configurations setting

Not Run

Check for model parameters suited for the HDL code generation

Not Run

Check for visualization settings

Not Run

Check algebraic loops

Not Run

Checks for ports and subsystems 0 0 0 0 0 2

Check initial conditions of enabled and triggered subsystems

Not Run

Check for invalid top level subsystem

Not Run

Native Floating Point checks *0* *0* *0* *0* *0* *7*

Check for double datatypes in the model with Native Floating Point

Not Run

Check for Data Type Conversion blocks with incompatible settings

Not Run

Check for HDL Reciprocal block usage

Not Run

Check for Relational Operator block usage

Not Run

Check for single datatypes in the model

Not Run

Check for unsupported blocks with Native Floating Point

Not Run

Check blocks with nonzero ulp error

Not Run

Simscape 0 0 0 0 0 3

Check consistency of block parameter units

Not Run

Check for outdated AC source blocks

Not Run

Check for dry hydraulic nodes

Not Run

By Task 0 0 14 0 61 0

Modeling Physical Systems 0 0 0 0 2 0

Check consistency of block parameter units

Identify Simscape blocks with ambiguous setting of parameter units. For example, a block parameter expected in 'Hz' may be specified in the dialog with unit of 'rad/s'. Such settings could lead to unexpected conversion factors applied to the numerical value.

Passed

No Simscape blocks with ambiguous unit setting found in the model.

Check for dry hydraulic nodes

This check identifies connections of Simscape hydraulic blocks in a model that are considered dry. Dry nodes physically represent a hydraulic segment modeled as an incompressible fluid.

Passed

Check has passed. No dry hydraulic nodes found.

Replacing Blocks That Will Be Removed 0 0 0 0 1 0

Identify Environment Controller blocks to be replaced with Variant Source blocks

Passed

The model does not contain any Environment Controller blocks.

Simulation Accuracy 0 0 1 0 0 0

Check for non-continuous signals driving derivative ports

The following non-continuous signals drive derivative ports. Solver needs reset every time when these signal values change to ensure accurate simulation results. If any of these non-continuous signals drive derivative ports is not necessary from modeling perspective, simulation speed can be further improved.

Block	Port	Start Index	Width
ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/Sum1	1	0	1

For unnecessary non-continuous signals drive derivative ports, consider one of the following changes

- Making the signal(s) continuous.
- Replacing the continuous block(s) receiving these signals with discrete state versions of the block(s).

Simulation Runtime Accuracy Diagnostics 0 0 0 0 2 0

Runtime diagnostics for S-functions

Passed

Check if Read/Write diagnostics are enabled for Data Store blocks

Passed

Managing Data Store Memory Blocks 0 0 1 0 3 0

Check Data Store Memory blocks for multitasking, strong typing, and shadowing issues

Duplicate data store names checking is not set to 'error'. Duplicate usage of data store names can lead to unintended shadowing of data stores of higher model scope. Consider changing the Duplicate data store names setting to 'error'.

Check data store block sample times for modeling errors

Passed

Check for potential ordering issues involving data store access

Passed

Check for relative execution order change for Data Store Read and Data Store Write blocks

The system does not have any Data Store Read or Data Store Write blocks.

Simulink Model File Integrity 0 0 0 0 1 0

Check Model History properties

Check models for edited Model History property values

Check that parameters in the Model Properties dialog History pane use the default tags. In the MDL file format you can configure some model properties to make use of source control tool keyword substitution. If you save your model in SLX format, source control tools cannot perform keyword substitution. Any information in the model file from such keyword substitution is cached when you first save the MDL file as SLX, and is never updated again. The Model Properties History pane and any Model Info blocks in your model show stale information from then on.

Passed

This model uses the default value for property ModifiedByFormat.

Passed

This model uses the default value for property ModifiedDateFormat.

Passed

This model uses the default value for property ModelVersionFormat.

S-function Checks 0 0 0 0 1 0

Check S-functions in the model

There are no user-defined S-functions in the model.

Units Inconsistencies 0 0 0 0 5 0

Identify unit mismatches in the model

Check for unit mismatches in the model.

Passed

No unit mismatches found.

Identify automatic unit conversions in the model

Check for automatic unit conversions.

Passed

No automatic unit conversions found.

Identify disallowed unit systems in the model

Check for disallowed unit systems.

Passed

No disallowed unit systems were found.

Identify undefined units in the model

Check for undefined units.

Passed

No undefined units were found.

Identify ambiguous units in the model

Check for ambiguous units.

Passed

No ambiguous units were found.

Modeling Signals and Parameters using Buses 0 0 1 0 2 0

Check for optimal bus virtuality

Passed

Check structure parameter usage with bus signals

This test is skipped because it requires an activated Simulink Coder product

---

Check bus signals treated as vectors

Bus signal treated as vector

Identify bus signals in the model that are treated as vectors by the Simulink software.

Warning

The model uses bus signals properly. However, the model is not configured to detect future changes that might result in improper bus signal usage.

Recommended Action

To detect these changes, in the Configuration Parameters dialog box, set the **Bus signal treated as vector** diagnostic to `error`.

Buses - Bus signal treated as vector

Code Generation Efficiency 0 0 2 0 9 0

Check optimization settings

Check optimization settings

Warning

The model configuration parameters are not set to the recommended values specified in the data file.

Status	Parameter	Current Value	Recommended Values
Warning	StateBitsets	off	on
Warning	DataBitsets	off	on

Recommended Action

Follow the links in the result table to modify the model configuration parameters.

Identify blocks using one-based indexing

Check the model for blocks configured for one-based indexing

Passed

All blocks in the model use zero-based indexing.

Identify questionable software environment specifications

Passed

Identify lookup table blocks that generate expensive out-of-range checking code

Passed

Identify questionable code instrumentation (data I/O)

Passed

Check output types of logic blocks

Identify logic blocks that are outputting non-Boolean data types.

Passed

All logic blocks are being used appropriately.

Check configuration parameters for generation of inefficient saturation code

Passed

Identify blocks that generate expensive rounding code

Check for expensive rounding operations in multiplication and division

Passed

Check Optimization and Hardware Implementation settings (Lookup Blocks)

Passed

Check for expensive rounding in a data type conversion

Passed

Check for expensive rounding modes in the model

Passed

Identify questionable fixed-point operations

Check for multiword operations

Passed

Check for expensive multiplication code

Passed

Check for expensive division code

Passed

Identify lookup blocks with uneven breakpoint spacing

Warning

Configuration parameter 'Default parameter behavior' is set to 'Tunable'. For optimized fixed-point code set the parameter to 'Inlined'.

Check for expensive pre-lookup division

Passed

Check for expensive data type conversions

Passed

Check for fixed-point comparisons with predetermined results

Passed

Check for expensive binary comparison operations

Passed

Check for expensive fixed-point types

Passed

Identify blocks that generate expensive fixed-point and saturation code

Identify Sum blocks for questionable fixed-point operations

Passed

Identify Relational Operation blocks for questionable fixed-point operations

Passed

Identify Data Type Conversion Inherited blocks for questionable fixed-point operations

Passed

Identify Switch blocks for questionable fixed-point operations

Passed

Identify Logic blocks for questionable fixed-point operations

Passed

Identify Saturate blocks for questionable fixed-point operations

Passed

Identify Min Max blocks for questionable fixed-point operations

Passed

Identify Discrete Integrator blocks for questionable fixed-point operations

Passed

Identify Compare To Constant blocks for questionable fixed-point operations

Passed

Identify Lookup Table blocks for questionable fixed-point operations

Passed

Identify blocks that will invoke net slope computation

Passed

Identify Product blocks that are less efficient

Passed

Check for expensive saturation code

Passed

Identify blocks generating inefficient algorithms

Passed

No inefficient algorithms found in the model.

Modeling Single-Precision Systems 0 0 1 0 0 0

Identify questionable operations for strict single-precision design

Check model settings related to single-precision design

This check verifies the status of model settings that will help you achieve a strict single-precision design.

Warning

The following model settings are non-optimal to a single-precision design:

Model Name	Configuration Parameter	Current Value	Recommended Value
ABS_v1	Default for underspecified data type	double	single

Check for double precision operations

This check identifies blocks that introduce double-precision operations. For each block that the check identifies, make sure that its port data types and intermediate settings are set correctly.

Warning

The following blocks use double-precision floating-point operations:

- ABS_v1/ABS control System/relative slip calculator/Constant
- ABS_v1/ABS control System/angular vehicle speed
- ABS_v1/ABS control System/relative slip calculator/Divide
- ABS_v1/ABS control System/relative slip calculator/Sum1
- ABS_v1/ABS control System/Relative Slip
- ABS_v1/Wheel slip
- ABS_v1/stopping distance
- ABS_v1/vehicle speed
- ABS_v1/wheel speed
- ABS_v1/ABS control System/Stop Simulation
- ABS_v1/ABS control System/normal force
- ABS_v1/ABS control System/mu-slip lookup table

ABS_v1/ABS control System/relative slip calculator/Sum1

- ABS_v1/ABS control System/mu-slip lookup table
- ABS_v1/ABS control System/wheel radius
- ABS_v1/ABS control System/Gain
- ABS_v1/ABS control System/Sum
- ABS_v1/ABS control System/wheel speed calculator/force and torque
- ABS_v1/ABS control System/wheel speed calculator/Sum1
- ABS_v1/ABS control System/wheel speed calculator/Gain
- ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/Sum1
- ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/Data Type Conversion
- ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/Data Type Conversion1
- ABS_v1/ABS control System/wheel speed calculator/Integrator Limited
- ABS_v1/ABS control System/ang vehicle speed
- ABS_v1/ABS control System/stopping distance
- ABS_v1/ABS control System/wheel speed calculator/braking pressure
- ABS_v1/ABS control System/wheel speed calculator/hydraulic lag
- ABS_v1/Step
- ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/GreaterThan

ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/Less Than

- ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/Constant
- ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/GreaterThan
- ABS_v1/ABS control System/wheel speed calculator/bang-bang controller/Less Than

Λ Less

Migrating to Simplified Initialization mode 0 0 0 0 4 0

Check usage of Merge blocks

Check usage of Merge blocks

This check finds and reports issues related to merge blocks for migrating to simplified initialization mode.

See Also

- Check usage of Merge blocks
- Underspecified initialization detection

Passed

Check usage of Outport blocks

Check usage of Outport blocks

This check finds and reports issues related to Outport blocks and Conditional Subsystems for migrating to simplified initialization mode.

See Also

- Check usage of Outport blocks
- Underspecified initialization detection

Passed

Check usage of Discrete-Time Integrator blocks

Check usage of Discrete-Time Integrator blocks

This check finds and reports issues related to Discrete-Time Integrator blocks for migrating to simplified initialization mode

See Also

- Check usage of Discrete-Time Integrator blocks
- Underspecified initialization detection

Passed

Check model settings for migration to simplified initialization mode

Check for model level messages

This check finds and reports model level messages for migrating to simplified initialization mode.

See Also

- Check model settings for migration to simplified initialization mode
- Underspecified initialization detection

Passed

Row-Major Code Generation 0 0 1 0 2 0

Identify blocks generating inefficient algorithms

Passed

No inefficient algorithms found in the model.

Check for blocks not supported for row-major code generation

Identify blocks not supported by row-major code generation.

Warning

The following blocks do not support row-major code generation:

- ABS_v1/ABS control System/ang vehicle speed
- ABS_v1/ABS control System/stopping distance
- ABS_v1/ABS control System/wheel speed calculator/Integrator Limited
- ABS_v1/ABS control System/wheel speed calculator/braking pressure
- ABS_v1/ABS control System/wheel speed calculator/hydraulic lag

---

Identify TLC S-Functions with unset array layout

List all S-Functions which have SSArrayLayout set to SS_UNSET. These S-Functions can have numerical implications in the generated code.

Passed

No TLC S-Functions found with SSArrayLayout set to SS_UNSET.

Model Referencing 0 0 1 0 7 0

Check for model reference configuration mismatch

Passed

Check diagnostic settings ignored during accelerated model reference simulation

The configuration parameter settings passed the check.

Check code generation identifier formats used for model reference

The configuration parameter settings passed the check.

Check for parameter tunability information ignored for referenced models

Passed

Check for implicit signal resolution

Passed

Check bus signals treated as vectors

Bus signal treated as vector

Identify bus signals in the model that are treated as vectors by the Simulink software.

Warning

The model uses bus signals properly. However, the model is not configured to detect future changes that might result in improper bus signal usage.

Recommended Action

To detect these changes, in the Configuration Parameters dialog box, set the **Bus signal treated as vector** diagnostic to `error`.

Buses - Bus signal treated as vector

Check root model Inport block specifications

Passed

Check for large number of function arguments from virtual bus across model reference boundary

No referenced models found.

Managing Library Links And Variants 0 0 0 0 4 0

Identify disabled library links

Passed

Identify parameterized library links

Passed

Identify unresolved library links

Passed

Identify configurable subsystem blocks in the model for converting to variant subsystem blocks.

Identify and upgrade Configurable Subsystem blocks in the model or subsystem level.

Passed

No configurable subsystem blocks found.

Data Transfer Efficiency 0 0 0 0 1 0

Check Delay, Unit Delay and Zero-Order Hold blocks for rate transition

Passed

The model does not contain Delay, Unit Delay or Zero-Order Hold blocks that perform rate transition.

Modeling Standards for MISRA C:2012 0 0 2 0 11 0

Check configuration parameters for MISRA C:2012

Identify configuration parameters that might impact MISRA C:2012 compliant code generation.

Warning

The model configuration parameters are not set to the recommended values specified in the data file.

Status	Parameter	Current Value	Recommended Values	Prerequisites
Warning	Model Verification block enabling (AssertControl)	UseLocalSettings	DisableAll	
D - Warning	UtilityFuncGeneration	Auto	Shared location	
Warning	GenerateSharedConstants	*Prerequisite constraint not met.*	off	UtilityFuncGeneration
D - Warning	SystemTargetFile	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	SupportNonInlinedSFcns	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	MatFileLogging	on	off	
Warning	ParenthesesLevel	*Prerequisite constraint not met.*	Standards, Maximum	SystemTargetFile
Warning	CastingMode	*Prerequisite constraint not met.*	Standards	SystemTargetFile
Warning	InternalIdentifier	*Prerequisite constraint not met.*	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	

Warning	EnableSignedLeftShifts	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	EnableSignedRightShifts	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	Inf or NaN block output (SignalInfNanChecking)	none	warning	
Warning	Dynamic memory allocation in MATLAB functions (MATLABDynamicMemAlloc)	on	off	
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error	
Warning	Compile-time recursion limit for MATLAB functions (CompileTimeRecursionLimit)	50	0	
Warning	Enable run-time recursion for MATLAB functions (EnableRuntimeRecursion)	on	off	
Warning	MATLABFcnDesc	*Prerequisite constraint not met.*	on	GenerateComments, SystemTargetFile
Warning	InstructionSetExtensions	SSE2	None	

Λ Less

Recommended Action

Modify the configuration parameters listed above to the recommended values.

Check for blocks not recommended for C/C++ production code deployment

Passed

Check for blocks not recommended for MISRA C:2012

Passed

Check for unsupported block names

Passed

Check usage of Assignment blocks

Passed

Check for switch case expressions without a default case

Identify switch case expressions that do not have a default case.

Passed

All switch case expressions have default cases.

Check for missing error ports in AUTOSAR receiver interfaces

Identify AUTOSAR receiver interface ports that do not have a matching error port.

Passed

Model is not configured as an AUTOSAR target.

Check for bitwise operations on signed integers

Identify bitwise operations on signed integers.

Passed

No bitwise operations on signed integers found.

Check for recursive function calls

Identify function calls that are recursive.

Passed

No recursive function calls found.

Check for equality and inequality operations on floating-point values

Identify equality and inequality operations on floating-point values.

Warning

The following model objects have equality or inequality operations on floating-point values.

Location
ABS_v1/ABS control System/Stop Simulation

Recommended Action

Consider using non-floating-point values for equality or inequality operations.

Check for missing const qualifiers in model functions

Identify missing const qualifiers in model functions.

Passed

Model does not use customized model functions.

Check integer word lengths

Identify integer word length that are not compliant with hardware implementation settings.

Passed

All used integer word length are compliant with hardware implementation settings.

Check bus object names that are used as bus element names

Identify bus object names that are used as bus element names.

Passed

No bus object names are used as bus element names.

Modeling Standards for Secure Coding (CERT C, CWE, ISO/IEC TS 17961) 0 0 3 0 6 0

Check configuration parameters for secure coding standards

Identify configuration parameters that might impact secure coding standards compliant code generation.

Warning

The model configuration parameters are not set to the recommended values specified in the data file.

Status	Parameter	Current Value	Recommended Values	Prerequisites
Warning	Model Verification block enabling (AssertControl)	UseLocalSettings	DisableAll	
D - Warning	SystemTargetFile	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	*Prerequisite constraint not met.*	off	SystemTargetFile

Warning	SupportNonInlinedSFcns	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	MatFileLogging	on	off	
Warning	EnableSignedLeftShifts	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	EnableSignedRightShifts	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	Inf or NaN block output (SignalInfNanChecking)	none	warning	
Warning	Dynamic memory allocation in MATLAB functions (MATLABDynamicMemAlloc)	on	off	
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error	
Warning	Compile-time recursion limit for MATLAB functions (CompileTimeRecursionLimit)	50	0	
Warning	Enable run-time recursion for MATLAB functions (EnableRuntimeRecursion)	on	off	
Warning	MATLABFcnDesc	*Prerequisite constraint not met.*	on	GenerateComments, SystemTargetFile

Λ Less

Recommended Action

Modify the configuration parameters listed above to the recommended values.

Check for blocks not recommended for C/C++ production code deployment

Passed

Check for blocks not recommended for secure coding standards

Passed

Check usage of Assignment blocks

Passed

Check for switch case expressions without a default case

Identify switch case expressions that do not have a default case.

Passed

All switch case expressions have default cases.

Check for bitwise operations on signed integers

Identify bitwise operations on signed integers.

Passed

No bitwise operations on signed integers found.

Check for equality and inequality operations on floating-point values

Identify equality and inequality operations on floating-point values.

Warning

The following model objects have equality or inequality operations on floating-point values.

Location
ABS_v1/ABS control System/Stop Simulation

Recommended Action

Consider using non-floating-point values for equality or inequality operations.

Check integer word lengths

Identify integer word length that are not compliant with hardware implementation settings.

Passed

All used integer word length are compliant with hardware implementation settings.

High-Integrity Systems 0 0 1 0 0 0

Code 0 0 1 0 0 0

Check configuration parameters for MISRA C:2012

Identify configuration parameters that might impact MISRA C:2012 compliant code generation.

Warning

The model configuration parameters are not set to the recommended values specified in the data file.

Status	Parameter	Current Value	Recommended Values	Prerequisites

Warning	Model Verification block enabling (AssertControl)	UseLocalSettings	DisableAll	
D - Warning	UtilityFuncGeneration	Auto	Shared location	
Warning	GenerateSharedConstants	*Prerequisite constraint not met.*	off	UtilityFuncGeneration
D - Warning	SystemTargetFile	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	SupportNonInlinedSFcns	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	MatFileLogging	on	off	
Warning	ParenthesesLevel	*Prerequisite constraint not met.*	Standards, Maximum	SystemTargetFile
Warning	CastingMode	*Prerequisite constraint not met.*	Standards	SystemTargetFile
Warning	InternalIdentifier	*Prerequisite constraint not met.*	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	*Prerequisite constraint not met.*	off	SystemTargetFile

Warning	EnableSignedRightShifts	*Prerequisite constraint not met.*	off	SystemTargetFile
Warning	Inf or NaN block output (SignalInfNanChecking)	none	warning	
Warning	Dynamic memory allocation in MATLAB functions (MATLABDynamicMemAlloc)	on	off	
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error	
Warning	Compile-time recursion limit for MATLAB functions (CompileTimeRecursionLimit)	50	0	
Warning	Enable run-time recursion for MATLAB functions (EnableRuntimeRecursion)	on	off	
Warning	MATLABFcnDesc	*Prerequisite constraint not met.*	on	GenerateComments, SystemTargetFile
Warning	InstructionSetExtensions	SSE2	None	

Λ Less

Recommended Action

Modify the configuration parameters listed above to the recommended values.

Upgrading to the Current Simulink Version 0 0 1 0 0 0

Open the Upgrade Advisor

Warning

To check for upgrade issues, open the Upgrade Advisor.

Recommended Action

Click the link below to close the Model Advisor and open the Upgrade Advisor for ABS_v1.

Open the Upgrade Advisor