Model Advisor Report – Heli_inner_loop.slx

Simulink version: 9.2 **Model version:** 1.30

System: Heli_inner_loop **Current run:** 01-Nov-2018 08:37:19

Treat as Referenced Model: on

Run Summary

Pass	Fail	Warning	Not Run	Total
178	0	0	0	178

Model Advisor

By Task 178 0 0 0

Modeling Standards for DO-178C/DO-331 113 0 0 0

Display model version information

Display model configuration and checksum information.

Model configuration and checksum information

Attribute	Value
Model Version	1.30
Author	bpotter
Date	Thu Oct 25 13:15:12 2018
Model Checksum	3409145648 3469104203 3084599850 1413408406

High-Integrity Systems 88 0 0 0

Simulink 28 0 0 0

Check usage of Abs blocks

Check usage of Abs blocks

Identify Absolute Value blocks that might produce unreachable code or overflows

Passed

There are no Abs blocks in the model.

Check usage of Math Function blocks (rem and reciprocal functions)

Check usage of Math Function - Remainder after division blocks

Identify Math Function - Remainder after division blocks that might result in non-finite output signals.

Passed

No Math Function - Remainder after division blocks found.

Check usage of Math Function - Reciprocal blocks

Identify Math Function - Reciprocal blocks that might result into non-finite signals at their outputs.

Passed

No Math Function - Reciprocal blocks found.

Check usage of Math Function blocks (log and log10 functions)

Check usage of Math Function - Natural logarithm blocks

Identify Math Function - Natural logarithm blocks that might result in non-finite output signals.

Passed

No Math Function - Natural logarithm blocks found.

Check usage of Math Function - Common (base 10) logarithm blocks

Identify Math Function - Common (base 10) logarithm blocks that might result in non-finite output signals.

Passed

No Math Function - Common (base 10) logarithm blocks found.

Check usage of While Iterator blocks

Identify While Iterator blocks that do not have a positive value for the maximum number of iterations

Passed

No While Iterator blocks found that might cause infinite loops

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Check usage of For and While Iterator subsystems

Check sample time-dependent blocks

Identify sample time-dependent blocks in While and For Iterator subsystems.

Passed

No For or While Iterator subsystems found.

Check usage of For Iterator blocks

Identify For Iterator blocks that cause variable loops

Identify For Iterator blocks that cause variable loops

Passed

No For Iterator blocks found that cause variable loops

Check usage of If blocks and If Action Subsystem blocks

Identify If and If Action Subsystem blocks without else conditions

Passed

No If blocks with questionable configurations or connections were found.

Check usage of Switch Case blocks and Switch Case Action Subsystem blocks

Identify inappropriately used Switch Case blocks and Switch Case Action Subsystem blocks

Passed

No Switch Case blocks with questionable configurations or connections were found.

Check usage of conditionally executed subsystems

Identify blocks with improper sample times in conditionally executed subsystems

Passed

No blocks found with improper sample times.

Identify asynchronously executed sample-time dependent blocks

Passed

No asynchronously executed sample-time dependent blocks found.

Check usage of Merge blocks

Identify Merge blocks which can lead to ambiguous behavior.

Passed

No merge blocks found which can lead to ambiguous behavior.

Check for Relational Operator blocks that equate floating-point types

Identify Relational Operator blocks that equate floating-point types

Passed

No Relational Operator blocks found that equate floating-point types.

Check usage of Relational Operator blocks

Identify Relational Operator blocks that operate on different data types or have a non-boolean output

Passed

No Relational Operator blocks found that operate on different data types or have a non-boolean output.

Check usage of Logical Operator blocks

Identify Logical Operator blocks that operate on non-boolean data types

Passed

No Logical Operator blocks found that operate on non-boolean data types.

Check usage of Bitwise Operator block

Identify Bitwise Operator blocks with signed integer inputs

Passed

No Bitwise Operator blocks found with signed integer inputs.

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

Identify blocks not supported by code generation or not recommended for C/C++ production code deployment.

Passed

Blocks not recommended for C/C++ production code deployment were not found in the model or subsystem.

Check for inconsistent vector indexing methods

Check consistent usage of vector indexing methods across the model or subsystem

Passed

No blocks using vector indexing were found

Check data types for blocks with index signals

Check Simulink blocks

Passed

No blocks found with index signals that have data types other than integer or enums.

Check MATLAB Function blocks

Passed

No index variables found with inappropriate data types.

Check Stateflow charts

Passed

No charts found with index variables that have data types other than integer or enums.

Check for variant blocks with 'Generate preprocessor conditionals' active

No variant blocks with "Generate preprocessor conditionals" on were found.

Check usage of lookup table blocks

Check for Lookup Table blocks, Prelookup blocks and Interpolation blocks that do not generate out-of-range checking code.

Passed

There are no Lookup Table blocks, Prelookup blocks and Interpolation blocks in the model.

Check usage of Signal Routing blocks

Check Switch blocks

Identify Switch blocks that might generate code with inequality operations (~=) in expressions where at least one side of the expression is a floating-point variable or constant.

Passed

There are no Switch blocks in the model or subsystem.

Check for root Inports with missing properties

Identify Inport blocks in the top-level of the model with missing or inherited sample times, data types, or port dimensions. Inport block properties are specified with block parameters or Simulink signal data objects that explicitly resolve to the connected signal lines.

Passed

There are no Inport blocks in the top-level of the model with missing or inherited sample times, data types, or port dimensions

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Check for root Inports with missing range definitions

Identify root-level Inport blocks with missing or erroneous minimum or maximum values. Inport block minimum and maximum values are specified with block parameters or Simulink signal objects that explicitly resolve to the connected signal lines.

Passed

There are no missing or erroneous Inport range properties at the model root level.

Check for root Outports with missing range definitions

Identify root-level Outport blocks with missing or erroneous minimum or maximum values. Outport block minimum and maximum values are specified with block parameters or Simulink signal objects that explicitly resolve to the connected signal lines.

Passed

There are no missing or erroneous Outport range properties at the model root level.
Root Outports with inherited data types are not analyzed by this check.

Check usage of Assignment blocks

Check Usage of Assignment blocks

Identify Assignment blocks with possibly incomplete array initialization that do not have the simulation run-time diagnostic **Action if any output element is not assigned** set to:

- Warning, if Assignment block is in an iterator subsystem
- Error, if Assignment block is not in an iterator subsystem

Passed

All Assignment blocks are configured with block parameter **Action if any output element is not assigned** set to Warning or Error.

Check global variables in graphical functions

hisl_0062 : Global variables in graphical functions
Identify expressions that both read and write to the same global data.

Passed

No expressions found that both read and write to the same global data.

Check usage of Gain blocks

Identify Gain blocks with value which resolves to 1

Passed

No Gain blocks found with value which resolves to 1.

Check for length of user-defined object names

Check function name options in Subsystem blocks

Passed

No Subsystem blocks found with function name length greater than threshold (31).

Check lengths of data object names

Passed

There are no data objects with names having length greater than threshold (31).

Check data type of loop control variables

Check For Iterator blocks

Identify For Iterator blocks using non-integer data type for loop control counter variable.

Passed

No For Iterator blocks found using non-integer data type for loop control counter variable.

Check For loops in MATLAB Function blocks

Identify For loops using non-integer data type for loop control counter variable.

Passed

No For loops found using non-integer data type for loop control counter variable.

Stateflow 14 0 0 0

Check state machine type of Stateflow charts

hisf_0001: State Machine Type

Identify Stateflow Charts whose State Machine Type differs from the type set in the Model Advisor Configuration Editor.

Passed

No Stateflow Charts found that deviate from recommended state machine type.

Check Stateflow charts for ordering of states and transitions

Identify Stateflow charts that do not use explicit ordering of parallel states and transitions.

Passed

No Stateflow Charts found that deviate from recommended state/transition execution order settings.

Check usage of bitwise operations in Stateflow charts

Identify usage of signed integer operands to bitwise operators in Stateflow charts with C action language.

Passed

No Stateflow objects found that use signed integer operands with bitwise operators.

Check for Strong Data Typing with Simulink I/O

Verify configuration settings for strong data typing on the boundaries between Simulink and Stateflow

Passed

No Stateflow charts found that set 'Use Strong Data Typing with Simulink I/O' to off.

Check Stateflow debugging options

Identify whether the following Stateflow debugging options are cleared: **Detect wrap on overflow** , **Detect Cycles**, and **Simulation range checking**

Passed

No Stateflow charts were found.

Check Stateflow charts for transition paths that cross parallel state boundaries

Identify transition paths that cross parallel state boundaries in Stateflow charts.

Passed

No transition paths crossing parallel state boundaries were found in Stateflow charts.

Check for inappropriate use of transition paths

hisf_0014: Usage of transition paths (passing through states)

Identify transition paths that go into and out of a state without ending on a substate.

Passed

No transition paths found that go into and out of a state without ending on a substate.

Check Stateflow charts for strong data typing

Identify expressions with variables and parameters of different data types in Stateflow objects.

Passed

No expressions were found with variables and parameters of different data types.

Check naming of ports in Stateflow charts

Identify mismatches between names of Stateflow ports and associated signals

Passed

There are no name mismatches between Stateflow ports and associated signals

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Check scoping of Stateflow data objects

Check Stateflow data object scoping

Identify Stateflow data objects with local scope that are not scoped at the chart level or below

Passed

No Stateflow charts were found.

Check Stateflow charts for uniquely defined data objects

Identifies local data identifiers that are defined in multiple scopes within a chart.

Passed

No Stateflow charts were found.

Check usage of shift operations for Stateflow data

Identify usage of Stateflow bit-shifting operations that might impact safety.

Passed

There are no Stateflow bit-shifting operations greater than the bit-width of the input or output type.

Check assignment operations in Stateflow charts

Identify assignment operations in Stateflow objects which cast integer and fixed-point calculations to wider datatype.

Passed

No assignment operations were found which cast integer and fixed-point calculations to wider datatype.

Check Stateflow charts for unary operators

Identify unary minus operators on unsigned data types in Stateflow objects.

Passed

No unary minus operations on unsigned data types were found in Stateflow objects.

MATLAB 9 0 0 0

Check usage of standardized MATLAB function headers

himl_0001: Usage of standardized MATLAB function headers

Identify usage of standardized function headers in MATLAB function.

Passed

No MATLAB function blocks found without standardized function headers.

Check for MATLAB Function interfaces with inherited properties

Identify MATLAB Functions that have inputs, outputs, or parameters with inherited complexity or data type properties.

Passed

No MATLAB Functions found in the model or subsystem.

Check MATLAB Function metrics

Identify MATLAB Functions that violate complexity limits.

Passed

No MATLAB Functions were found.

Input Parameters Selection

Name	Value
Maximum effective lines of code per function	60
Minimum density of comments	0.2
Maximum cyclomatic complexity per function	15

Check MATLAB Code Analyzer messages

Check MATLAB code used in MATLAB Function blocks

Passed

No MATLAB Function blocks found

Check MATLAB functions defined in Stateflow charts

Passed

No MATLAB functions defined in Stateflow charts found

Check called MATLAB functions

Passed

No external MATLAB functions found

Check if/elseif/else patterns in MATLAB Function blocks

Identify if/elseif/else patterns without appropriate else conditions in embedded MATLAB code

Passed

No inappropriate if/elseif/else patterns found.

Check switch statements in MATLAB Function blocks

Identify inappropriately used switch statements in embedded MATLAB code

Passed

No inappropriately used switch statements found.

Check usage of relational operators in MATLAB Function blocks

Identify relational operators operating on operands of different data types in MATLAB Function blocks.

Passed

No relational operators found operating on operands of different data types.

Check usage of equality operators in MATLAB Function blocks

Identify equality operators used with floating-point operands in MATLAB Function blocks.

Passed

No equality operators found operating on floating-point operands.

Check usage of logical operators and functions in MATLAB Function blocks

Identify logical operators and functions operating on operands with numerical data types.

Passed

No logical operators or functions found operating on operands with numerical data types.

Configuration 32 0 0 0

Check safety-related diagnostic settings for data store memory

Check diagnostic settings in the model configuration that apply to data store memory and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Detect read before write (ReadBeforeWriteMsg)	EnableAllAsError	EnableAllAsError
Pass	Detect write after read (WriteAfterReadMsg)	EnableAllAsError	EnableAllAsError
Pass	Detect write after write (WriteAfterWriteMsg)	EnableAllAsError	EnableAllAsError
Pass	Multitask data store (MultiTaskDSMMsg)	error	error
Pass	Duplicate data store names (UniqueDataStoreMsg)	error	error

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Check safety-related diagnostic settings for saving

Check diagnostic settings in the model configuration that apply to saving model files.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	error	error

Pass	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	error	error

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Check safety-related model referencing settings

Check model referencing settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Rebuild (UpdateModelReferenceTargets)	IfOutOfDateOrStructuralChange	AssumeUpToDate, IfOutOfDateOrStructuralChange
Pass	Pass fixed-size scalar root inputs by value for code generation (ModelReferencePassRootInputsByReference) *	on	on
Pass	Minimize algebraic loop occurrences (ModelReferenceMinAlgLoopOccurrences)	off	off

Recommended Action

* The Command-Line values provided in the table are reverse of the settings in the Configuration Parameters Dialog. Therefore, 'on' in the Command-Line corresponds to an "Off" setting in the dialog, and 'off' in the Command-Line corresponds to an "On" setting in the dialog.

Check safety-related code generation settings for comments

Check code generation settings in the model configuration that apply comments and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Prerequisites
Pass	Include comments (GenerateComments)	on	on	
Pass	Simulink block comments (SimulinkBlockComments)	on	on	GenerateComments
Pass	Show eliminated blocks (ShowEliminatedStatement)	on	on	GenerateComments
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target	
Pass	Verbose comments for 'Model default' storage class (ForceParamTrailComments)	on	on	GenerateComments
D - Pass	Include comments (GenerateComments)	on	on	
Pass	Requirements in block comments (ReqsInCode)	on	on	SystemTargetFile, GenerateComments

Check safety-related code generation interface settings

Check code generation interface settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Prerequisites
Pass	non-finite numbers (SupportNonFinite)	off	off	
Pass	absolute time (SupportAbsoluteTime)	off	off	SystemTargetFile
Pass	continuous time (SupportContinuousTime)	off	off	SystemTargetFile
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target	
Pass	non-inlined S-functions (SupportNonInlinedSFcns)	off	off	SystemTargetFile
Pass	Classic call interface (GRTInterface)	off	off	
Pass	Single output/update function (CombineOutputUpdateFcns)	on	on	
Pass	Terminate function required (IncludeMdlTerminateFcn)	off	off	SystemTargetFile
Pass	Remove error status field in real-time model data structure (SuppressErrorStatus)	on	on	SystemTargetFile
Pass	MAT-file logging (MatFileLogging)	off	off	

Check safety-related solver settings for simulation time

This check ensures that model Start time is set to 0 and Stop time is less than the Application Life Span.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Start time (StartTime)	0	0
Pass	Stop time (StopTime)	10	10

Check safety-related solver settings for solver options

Check solver settings in the model configuration that apply to solvers and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Type (SolverType)	Fixed-step	Fixed-step
Pass	Solver (SolverName)	FixedStepDiscrete	FixedStepDiscrete

Check safety-related solver settings for tasking and sample-time

Check solver settings in the model configuration that apply to tasking and sample-time constraints and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Not Recommended Values
Pass	Automatically handle rate transition for data transfer (AutoInsertRateTranBlk)	off	on

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Check safety-related diagnostic settings for solvers

Check diagnostic settings in the model configuration that apply to solvers and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Algebraic loop (AlgebraicLoopMsg)	error	error

Pass	Minimize algebraic loop (ArtificialAlgebraicLoopMsg)	error	error
Pass	Block priority violation (BlockPriorityViolationMsg)	error	error
Pass	Automatic solver parameter selection (SolverPrmCheckMsg)	error	error
Pass	State name clash (StateNameClashWarn)	warning	warning

Check safety-related diagnostic settings for sample time

Check diagnostic settings in the model configuration that apply to sample time and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Source block specifies -1 sample time (InheritedTsInSrcMsg)	error	error
Pass	Multitask rate transition (MultiTaskRateTransMsg)	error	error
Pass	Multitask conditionally executed subsystem (MultiTaskCondExecSysMsg)	error	error
Pass	Enforce sample times specified by Signal Specification blocks (SigSpecEnsureSampleTimeMsg)	error	error
Pass	Single task rate transition (SingleTaskRateTransMsg)	error	error
Pass	Tasks with equal priority (TasksWithSamePriorityMsg)	error	error
Pass	Unspecified inheritability of sample time (UnknownTsInhSupMsg)	error	error

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Check safety-related optimization settings for logic signals

Check optimization settings in the model configuration that apply to logic signals and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Implement logic signals as Boolean data (vs. double) (BooleanDataType)	on	on

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Check safety-related block reduction optimization settings

Check block reduction optimization settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Block reduction (BlockReduction)	off	off

Check safety-related code generation settings for code style

Check code generation settings in the model configuration that apply to code style and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Prerequisites
Pass	Parentheses level (ParenthesesLevel)	Maximum	Maximum	SystemTargetFile
Pass	Preserve operand order in expression (PreserveExpressionOrder)	on	on	SystemTargetFile
Pass	Preserve condition expression in if statement (PreserveIfCondition)	on	on	SystemTargetFile
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target	

Check safety-related optimization settings for application lifespan

Check optimization settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Application lifespan (days) (LifeSpan)	inf	Inf

Check safety-related code generation symbols settings

Check code generation symbols settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Not Recommended Values	Prerequisites
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target		
Pass	Minimum mangle length (MangleLength)	4		1, 2, 3	SystemTargetFile

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Check safety-related optimization settings for loop unrolling threshold

Check optimization settings in the model configuration that apply to loop unrolling threshold and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Not Recommended Values
Pass	Loop unrolling threshold (RollThreshold)	5	0, 1

Check safety-related optimization settings for data initialization

Check optimization settings in the model configuration that apply to data initialization and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target	
Pass	Remove root level I/O zero initialization (ZeroExternalMemoryAtStartup) *	on	on	SystemTargetFile
Pass	Remove internal data zero initialization (ZeroInternalMemoryAtStartup) *	on	on	SystemTargetFile

Recommended Action

* The Command-Line values provided in the table are reverse of the settings in the Configuration Parameters Dialog. Therefore, 'on' in the Command-Line corresponds to an "Off" setting in the dialog, and 'off' in the Command-Line corresponds to an "On" setting in the dialog.

Check safety-related optimization settings for data type conversions

Check optimization settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Remove code from floating-point to integer conversions that wraps out-of-range values (EfficientFloat2IntCast)	on	on

---

Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target	
Pass	Remove code that protects against division arithmetic exceptions (NoFixptDivByZeroProtection)	off	off	SystemTargetFile

---

Check safety-related optimization settings for specified minimum and maximum values

Check optimization settings in the model configuration that might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Prerequisites
Pass	Optimize using the specified minimum and maximum values (UseSpecifiedMinMax)	off	off	SystemTargetFile
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target	

Check safety-related diagnostic settings for compatibility

Check diagnostic settings in the model configuration that affect compatibility and might impact safety

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	S-function upgrades needed (SFcnCompatibilityMsg)	error	error

---

Check safety-related diagnostic settings for parameters

Check diagnostic settings in the model configuration that apply to parameters and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Detect downcast (ParameterDowncastMsg)	error	error
Pass	Detect underflow (ParameterUnderflowMsg)	error	error

Pass	Detect overflow (ParameterOverflowMsg)	error	error
Pass	Detect precision loss (ParameterPrecisionLossMsg)	error	error
Pass	Detect loss of tunability (ParameterTunabilityLossMsg)	error	error

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Check safety-related diagnostic settings for Merge blocks

Check diagnostic settings in the model configuration that apply to Merge blocks and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Detect multiple driving blocks executing at the same time step (MergeDetectMultiDrivingBlocksExec)	error	error

---

Check safety-related diagnostic settings for model initialization

Check whether **Configuration Parameters > Underspecified initialization detection** is set to `Simplified`. If it is set to `Classic` check that the sub-parameters are selected.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Underspecified initialization detection (UnderspecifiedInitializationDetection)	Simplified	Simplified

---

Check safety-related diagnostic settings for data used for debugging

Check diagnostic settings in the model configuration that apply to data used for debugging and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Model Verification block enabling (AssertControl)	DisableAll	DisableAll

---

Check safety-related diagnostic settings for signal connectivity

Check diagnostic settings in the model configuration that apply to signal connectivity and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Signal label mismatch (SignalLabelMismatchMsg)	error	error
Pass	Unconnected block input ports (UnconnectedInputMsg)	error	error
Pass	Unconnected block output ports (UnconnectedOutputMsg)	error	error
Pass	Unconnected line (UnconnectedLineMsg)	error	error

Check safety-related diagnostic settings for bus connectivity

Check diagnostic settings in the model configuration that apply to bus connectivity and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	error	error

Pass	Element name mismatch (BusObjectLabelMismatch)	error	error
Pass	Bus signal treated as vector (StrictBusMsg)	ErrorOnBusTreatedAsVector	ErrorOnBusTreatedAsVector
Pass	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	error	error
Pass	Repair bus selections (BusNameAdapt)	WarnAndRepair	WarnAndRepair

---

Check safety-related diagnostic settings that apply to function-call connectivity

Check diagnostic settings in the model configuration that apply to function-call connectivity and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Invalid function-call connection (InvalidFcnCallConnMsg)	error	error
Pass	Context-dependent inputs (FcnCallInpInsideContextMsg)	error	error

---

Check safety-related diagnostic settings for type conversions

Check diagnostic settings in the model configuration that apply to type conversions and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	warning	warning
Pass	Vector/matrix block input conversion (VectorMatrixConversionMsg)	error	error
Pass	32-bit integer to single precision float conversion (Int32ToFloatConvMsg)	warning	warning

---

Check safety-related diagnostic settings for model referencing

Check diagnostic settings in the model configuration that apply to model referencing and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Model block version mismatch (ModelReferenceVersionMismatchMessage)	none	none
Pass	Port and parameter mismatch (ModelReferenceIOMismatchMessage)	error	error
Pass	Invalid root Inport/Outport block connection (ModelReferenceIOMsg)	error	error
Pass	Unsupported data logging (ModelReferenceDataLoggingMessage)	error	error

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Check safety-related diagnostic settings for Stateflow

Check diagnostic settings in the model configuration that apply to Stateflow and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Unexpected backtracking (SFUnexpectedBacktrackingDiag)	error	error
Pass	Invalid input data access in chart initialization (SFInvalidInputDataAccessInChartInitDiag)	error	error
Pass	No unconditional default transitions (SFNoUnconditionalDefaultTransitionDiag)	error	error
Pass	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	error	error

Pass	Unreachable execution path (SFUnreachableExecutionPathDiag)	error	error
Pass	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	error	error
Pass	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	error	error

---

Check safety-related diagnostic settings for signal data

Check diagnostic settings in the model configuration that apply to signal data and might impact safety.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Signal resolution (SignalResolutionControl)	UseLocalSettings	None, UseLocalSettings
Pass	Division by singular matrix (CheckMatrixSingularityMsg)	error	error
Pass	Underspecified data types (UnderSpecifiedDataTypeMsg)	error	error
Pass	Wrap on overflow (IntegerOverflowMsg)	error	error
Pass	Saturate on overflow (IntegerSaturationMsg)	error	error
Pass	Inf or NaN block output (SignalInfNanChecking)	error	error
Pass	"rt" prefix for identifiers (RTPrefix)	error	error

Pass	Simulation range checking (SignalRangeChecking)	error	error

Naming 2 0 0 0

Check model file name

Identify inappropriate characters and length issues in model file name

Passed

No issues found with model file name.

Check model object names

Identify invalid names of following model objects (first invalid name fragment is highlighted):

- Blocks
- Signals
- Parameters
- Buses
- Stateflow elements

Passed

No invalid names of model objects found

Requirements 1 0 0 0

Check for model elements that do not link to requirements

Check for model elements that do not link to a requirements document

Passed

All model elements link to a requirements document.

Identify model elements with number of requirement links more than the threshold.

Passed

No model elements found that exceed the threshold for number of requirement links.

Identify linked model elements which exceed the threshold for number of children.

Passed

No components found that exceed the threshold for number of children.

Code 2 0 0 0

Check for blocks not recommended for MISRA C:2012

Identify blocks that are not recommended for MISRA C:2012 compliant code generation.

Passed

None of the blocks are defined as "not recommended" for MISRA C:2012 compliant code generation.

Check configuration parameters for MISRA C:2012

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

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values	Prerequisites
Pass	Model Verification block enabling (AssertControl)	Disable All	DisableAll	
D - Pass	Shared code placement (UtilityFuncGeneration)	Shared location	Shared location	
Pass	Generate shared constants (GenerateSharedConstants)	off	off	UtilityFuncGeneration
D - Pass	System target file (SystemTargetFile)	ERT based target	ERT based target	
Pass	non-finite numbers (SupportNonFinite)	off	off	
Pass	continuous time (SupportContinuousTime)	off	off	SystemTargetFile
Pass	non-inlined S-functions (SupportNonInlinedSFcns)	off	off	SystemTargetFile
Pass	MAT-file logging (MatFileLogging)	off	off	
Pass	Code replacement library (CodeReplacementLibrary)	None	None, AUTOSAR 4.0	
Pass	Parentheses level (ParenthesesLevel)	Maximum	Maximum	SystemTargetFile
Pass	Casting modes (CastingMode)	Standards	Standards	SystemTargetFile
Pass	System-generated identifiers (InternalIdentifier)	Shortened	Shortened	SystemTargetFile

Pass	Signed integer division rounds to (ProdIntDivRoundTo)	Zero	Zero, Floor	
Pass	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	on	on, UseDivisionForReciprocalsOfIntegersOnly	
Pass	Replace multiplications by powers of two with signed bitwise shifts (EnableSignedLeftShifts)	off	off	SystemTargetFile
Pass	Allow right shifts on signed integers (EnableSignedRightShifts)	off	off	SystemTargetFile
Pass	Wrap on overflow (IntegerOverflowMsg)	error	warning, error	
Pass	Preserve static keyword in function declarations (PreserveStaticInFcnDecls)	on	on	
Pass	Inf or NaN block output (SignalInfNanChecking)	error	warning, error	
Pass	Dynamic memory allocation in MATLAB functions (MATLABDynamicMemAlloc)	off	off	
Pass	External mode (ExtMode)	off	off	
Pass	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	error	error	
Pass	Compile-time recursion limit for MATLAB functions (CompileTimeRecursionLimit)	0	0	
Pass	Enable run-time recursion for MATLAB functions (EnableRuntimeRecursion)	off	off	

Λ Less

Simulink 10 0 0 0

Check for Discrete-Time Integrator blocks with initial condition uncertainty

Passed

Check root model Inport block specifications

Passed

Identify unconnected lines, input ports, and output ports

Identify unconnected lines, input ports, and output ports in the model

Passed

There are no unconnected lines, input ports, and output ports in this model.

Check usage of tunable parameters in blocks

Identify tunable parameters used to specify expressions, data type conversions, or indexing operations.

Passed

Tunable parameters are not used in the model.

Check for Strong Data Typing with Simulink I/O

Identify whether Stateflow charts have **Use Strong Data Typing with Simulink I/O** cleared.

Passed

No Stateflow charts were found.

Check for blocks that have constraints on tunable parameters

Identify Lookup Table blocks that have constraints on tunable parameters.

Check usage of Lookup Table blocks

Passed
No Lookup Table blocks with tunable parameters found.

Check usage of Lookup Table (2-D) blocks

Passed
No Lookup Table (2-D) blocks with tunable parameters found.

Check usage of n-D Lookup Table blocks

Passed
No n-D Lookup Table blocks with tunable parameters found.

Identify questionable subsystem settings

Passed
Subsystem blocks do not specify their **Function packaging** option as `Nonreusable function`.

Passed
Subsystems that specify the **Function packaging** option as `Reusable function` are not checked since the Model Configuration Parameter **Shared code placement** is set to `Shared location`.

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.

Passed
The model uses bus signals properly. Model is configured to detect future changes that might result in improper bus signal usage.

Check for potentially delayed function-call block return values

Passed

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

Stateflow 2 0 0 0

Check Stateflow data objects with local scope

Identify Stateflow data objects with local scope that are not scoped at the chart level or below.

Passed
No Stateflow charts were found.

Check usage of exclusive and default states in state machines

Identify Stateflow charts and substates that incorrectly use or define exclusive and default states.

Check Stateflow charts for exclusive states
Identify Stateflow charts that have singular exclusive (OR) states.

Passed
The Stateflow charts do not have singular exclusive (OR) states.

Check Stateflow charts for undefined default states
Identify Stateflow charts that do not define default states.

Passed

Each Stateflow chart defines a default state.

Check for multiple states assigned as the default state
At the root level in the Stateflow hierarchy only one state should be assigned as the default.

Passed
The root level of the chart has only one default state assigned.

Check for substates with singular OR states
States configured as OR should always be part of a group of states.

Passed
No singular OR states were detected.

Check for substates without default states defined
At every level in the Stateflow hierarchy a default state should be assigned.

Passed
All substates have default states assigned.

Check for substates with multiple default states defined
At every level in the Stateflow hierarchy only one state should be assigned as the default.

Passed
All levels of the chart have only one default state assigned.

Library Links 3 0 0 0

Identify disabled library links
Passed

Identify parameterized library links
Passed

Identify unresolved library links
Passed

Model Referencing 2 0 0 0

Check for model reference configuration mismatch

Passed

Check for parameter tunability information ignored for referenced models

Passed

Requirements Consistency 4 0 0 0

Identify requirement links that specify invalid locations within documents

Passed

Identify requirement links with missing documents

Passed

Identify requirement links with path type inconsistent with preferences

Passed

Identify selection-based links having description fields that do not match their requirements document text

Passed

Simulink Coder 3 0 0 0

Check sample times and tasking mode

Passed

Check solver for code generation

Passed

Check the hardware implementation

Check 'Byte ordering' and 'Signed integer division rounds to' parameters

Identify inconsistencies or underspecification of hardware attributes that can lead to incorrect and inefficient generated code.

Passed

Target specification is consistent.

Check whether 'Production hardware' and 'Test hardware' match

Search for 'Test hardware is the same as production hardware' in the Configuration Parameters dialog box and check if it is selected. If it is cleared, identify whether target specifications match.

Passed

'Test hardware is the same as production hardware' is selected or is cleared and the target specifications match.

Simulink Code Inspector compatibility checks 65 0 0 0

Check code generation settings

Verify 'Code interface packaging' setting

Check whether **Code Generation > Interface > Code interface packaging** is set to `Nonreusable function or Reusable function`.

Passed

Code Generation > Interface > Code interface packaging is set to `Nonreusable function or Reusable function`.

Verify 'Use dynamic memory allocation for model initialization' setting

Check whether **Code Generation > Interface > Use dynamic memory allocation for model initialization** is cleared.

Passed

Code Generation > Interface > Use dynamic memory allocation for model initialization is cleared.

Verify 'Shared code placement' setting

Check whether **Code Generation > Interface > Shared code placement** is set to `Shared location`.

Passed

Code Generation > Interface > Shared code placement is set to `Shared location`.

Verify 'Source file' setting

Check whether **Code Generation > Custom Code > Source file** is set to `""` `(i.e. unspecified)`.

Passed

Code Generation > Custom Code > Source file is set to `""`.

Verify 'Header file' setting

Check whether **Code Generation > Custom Code > Header file** is set to `""` `(i.e. unspecified)`.

Passed

Code Generation > Custom Code > Header file is set to `""`.

Verify 'Initialize function' setting

Check whether **Code Generation > Custom Code > Initialize function** is set to `""` `(i.e. unspecified)`.

Passed

Code Generation > Custom Code > Initialize function is set to `""`.

Verify 'Terminate function' setting

Check whether **Code Generation > Custom Code > Terminate function** is set to `""` `(i.e. unspecified)`.

Passed

Code Generation > Custom Code > Terminate function is set to `""`.

Verify 'Disable incompatible optimizations' setting

Check whether **Code Generation > Optimization > Disable incompatible optimizations** is set to `-SLCI`.

Passed

Code Generation > Optimization > Disable incompatible optimizations is set to `-SLCI`.

Verify 'Combine signal/state structures' setting

Check whether **Code Generation > Interface > Combine signal/state structures** is cleared.

Passed

Code Generation > Interface > Combine signal/state structures is cleared.

Verify 'Remove reset function' setting

Check whether **Code Generation > Interface > Remove reset function** is selected.

Passed

Code Generation > Interface > Remove reset function is selected.

Verify 'Remove disable function' setting

Check whether **Code Generation > Interface > Remove disable function** is cleared.

Passed

Code Generation > Interface > Remove disable function is cleared.

Verify 'Remove code from floating-point to integer conversions that wraps out-of-range values' setting

Check whether **Code Generation > Optimization > Remove code from floating-point to integer conversions that wraps out-of-range values** is selected.

Passed

Code Generation > Optimization > Remove code from floating-point to integer conversions that wraps out-of-range values is selected.

Verify 'Remove code from floating-point to integer conversions with saturation that maps NaN to zero' setting

Check whether **Code Generation > Optimization > Remove code from floating-point to integer conversions with saturation that maps NaN to zero** is cleared.

Passed

Code Generation > Optimization > Remove code from floating-point to integer conversions with saturation that maps NaN to zero is cleared.

Verify 'Include comments' setting

Check whether **Code Generation > Comments > Include comments** is selected.

Passed

Code Generation > Comments > Include comments is selected.

Verify 'Preserve condition expression in if statement' setting
Check whether **Code Generation > Code Style > Preserve condition expression in if statement** is selected.

Passed
Code Generation > Code Style > Preserve condition expression in if statement is selected.

Verify 'Code replacement library' setting
Check whether **Code Generation > Interface > Code replacement library** is set to `None`.

Passed
Code Generation > Interface > Code replacement library is set to `None`.

Verify 'Standard math library' setting
Check whether **Code Generation > Interface > Standard math library** is set to `C89/C90 (ANSI) or C99 (ISO)`.

Passed
Code Generation > Interface > Standard math library is set to `C89/C90 (ANSI) or C99 (ISO)`.

Verify 'Classic call interface' setting
Check whether **Code Generation > Interface > Classic call interface** is cleared.

Passed
Code Generation > Interface > Classic call interface is cleared.

Verify 'Terminate function required' setting
Check whether **Code Generation > Interface > Terminate function required** is cleared.

Passed
Code Generation > Interface > Terminate function required is cleared.

Verify 'Remove code that protects against division arithmetic exceptions' setting
Check whether **Code Generation > Optimization > Remove code that protects against division arithmetic exceptions** is cleared.

Passed
Code Generation > Optimization > Remove code that protects against division arithmetic

exceptions is cleared.

Verify 'MAT-file logging' setting
Check whether **Code Generation > Interface > MAT-file logging** is cleared.

Passed
Code Generation > Interface > MAT-file logging is cleared.

Verify 'Maximum stack size (bytes)' setting
Check whether **Code Generation > Optimization > Maximum stack size (bytes)** is set to `inf`.

Passed
Code Generation > Optimization > Maximum stack size (bytes) is set to `inf`.

Verify 'Pack Boolean data into bitfields' setting
Check whether **Code Generation > Optimization > Pack Boolean data into bitfields** is cleared.

Passed
Code Generation > Optimization > Pack Boolean data into bitfields is cleared.

Verify 'Use bitsets for storing state configuration' setting
Check whether **Code Generation > Optimization > Use bitsets for storing state configuration** is cleared.

Passed
Code Generation > Optimization > Use bitsets for storing state configuration is cleared.

Verify 'non-finite numbers' setting
Check whether **Code Generation > Interface > non-finite numbers** is cleared.

Passed
Code Generation > Interface > non-finite numbers is cleared.

Verify 'absolute time' setting
Check whether **Code Generation > Interface > absolute time** is cleared.

Passed
Code Generation > Interface > absolute time is cleared.

Verify 'Default parameter behavior' setting
Check whether **Code Generation > Optimization > Default parameter behavior** is set to `Inlined`.

Passed
Code Generation > Optimization > Default parameter behavior is set to `Inlined`.

Verify 'Remove error status field in real-time model data structure' setting
Check whether **Code Generation > Interface > Remove error status field in real-time model data structure** is selected.

Passed
Code Generation > Interface > Remove error status field in real-time model data structure is selected.

Verify 'Create block' setting
Check whether **Code Generation > Verification > Create block** is set to `none`.

Passed
Code Generation > Verification > Create block is set to `none`.

Verify 'Measure function execution times' setting
Check whether **Code Generation > Verification > Measure function execution times** is set to `off`.

Passed
Code Generation > Verification > Measure function execution times is set to `off`.

Verify 'Signal naming' setting
Check whether **Code Generation > Symbols > Signal naming** is set to `None`.

Passed
Code Generation > Symbols > Signal naming is set to `None`.

Verify 'Parameter naming' setting
Check whether **Code Generation > Symbols > Parameter naming** is set to `None`.

Passed
Code Generation > Symbols > Parameter naming is set to `None`.

Verify 'TLC options' setting
Check whether **Code Generation > TLC options** is set to `""` `(i.e. unspecified)`.

Passed
Code Generation > TLC options is set to `""`.

Verify 'variable-size signals' setting
Check whether **Code Generation > Interface > variable-size signals** is cleared.

Passed
Code Generation > Interface > variable-size signals is cleared.

Verify 'Single output/update function' setting
Check whether **Code Generation > Interface > Single output/update function** is selected.

Passed
Code Generation > Interface > Single output/update function is selected.

Verify 'Generate an example main program' setting
Check whether **Code Generation > Templates > Generate an example main program** is selected.

Passed
Code Generation > Templates > Generate an example main program is selected.

Verify 'Use bitsets for storing Boolean data' setting
Check whether **Code Generation > Optimization > Use bitsets for storing Boolean data** is cleared.

Passed
Code Generation > Optimization > Use bitsets for storing Boolean data is cleared.

Verify 'Casting modes' setting
Check whether **Code Generation > Code Style > Casting modes** is set to `Nominal or Standards`.

Passed
Code Generation > Code Style > Casting modes is set to `Nominal or Standards`.

Verify 'Suppress generation of default cases for Stateflow switch statements if unreachable' setting
Check whether **Code Generation > Code Style > Suppress generation of default cases for Stateflow switch statements if unreachable** is cleared.

Passed

Code Generation > Code Style > Suppress generation of default cases for Stateflow switch statements if unreachable is cleared.

Verify 'Optimize using the specified minimum and maximum values' setting
Check whether **Code Generation > Optimization > Optimize using the specified minimum and maximum values** is cleared.

Passed
Code Generation > Optimization > Optimize using the specified minimum and maximum values is cleared.

Verify 'Existing shared code' setting
Check whether **Code Generation > Interface > Existing shared code** is set to `""` `(i.e. unspecified).`

Passed
Code Generation > Interface > Existing shared code is set to `""`.

Verify 'parameters' setting
Check whether **Code Generation > Interface > parameters** is cleared.

Passed
Code Generation > Interface > parameters is cleared.

Verify 'signals' setting
Check whether **Code Generation > Interface > signals** is cleared.

Passed
Code Generation > Interface > signals is cleared.

Verify 'states' setting
Check whether **Code Generation > Interface > states** is cleared.

Passed
Code Generation > Interface > states is cleared.

Verify 'root-level I/O' setting
Check whether **Code Generation > Interface > root-level I/O** is cleared.

Passed

Code Generation > Interface > root-level I/O is cleared.

Verify 'External mode' setting

Check whether **Code Generation > Interface > External mode** is cleared.

Passed

Code Generation > Interface > External mode is cleared.

Verify 'ASAP2 interface' setting

Check whether **Code Generation > Interface > ASAP2 interface** is cleared.

Passed

Code Generation > Interface > ASAP2 interface is cleared.

Verify 'Rate Transition block code' setting

Check whether **Code Generation > Code Placement > Rate Transition block code** is set to `Inline`.

Passed

Code Generation > Code Placement > Rate Transition block code is set to `Inline`.

Check data import and export settings

Verify 'Initial state' setting

Check whether **Data Import/Export > Initial state** is cleared.

Passed

Data Import/Export > Initial state is cleared.

Check diagnostic settings

Verify 'Multitask data store' setting

Check whether **Diagnostics > Data Validity > Multitask data store** is set to `error`.

Passed

Diagnostics > Data Validity > Multitask data store is set to `error`.

Verify 'Multitask rate transition' setting

Check whether **Diagnostics > Sample Time > Multitask rate transition** is set to `error`.

Passed

Diagnostics > Sample Time > Multitask rate transition is set to `error`.

Verify 'Multitask conditionally executed subsystem' setting

Check whether **Diagnostics > Sample Time > Multitask conditionally executed subsystem** is set to `error`.

Passed

Diagnostics > Sample Time > Multitask conditionally executed subsystem is set to `error`.

Verify 'Algebraic loop' setting

Check whether **Diagnostics > Algebraic loop** is set to `error`.

Passed

Diagnostics > Algebraic loop is set to `error`.

Verify 'Detect write after write' setting

Check whether **Diagnostics > Data Validity > Detect write after write** is set to `EnableAllAsError`.

Passed

Diagnostics > Data Validity > Detect write after write is set to `EnableAllAsError`.

Verify 'Underspecified initialization detection' setting

Check whether **Diagnostics > Data Validity > Underspecified initialization detection** is set to `Simplified`.

Passed

Diagnostics > Data Validity > Underspecified initialization detection is set to `Simplified`.

Verify 'Non-bus signals treated as bus signals' setting

Check whether **Diagnostics > Connectivity > Non-bus signals treated as bus signals** is set to `error`.

Passed

Diagnostics > Connectivity > Non-bus signals treated as bus signals is set to `error`.

Verify 'Detect downcast' setting

Check whether **Diagnostics > Data Validity > Detect downcast** is set to `error`.

Passed

Diagnostics > Data Validity > Detect downcast is set to `error`.

Verify 'Detect overflow' setting

Check whether **Diagnostics > Data Validity > Detect overflow** is set to `error`.

Passed

Diagnostics > Data Validity > Detect overflow is set to `error`.

Verify 'Wrap on overflow' setting

Check whether **Diagnostics > Data Validity > Wrap on overflow** is set to `error`.

Passed

Diagnostics > Data Validity > Wrap on overflow is set to `error`.

Verify 'Saturate on overflow' setting

Check whether **Diagnostics > Data Validity > Saturate on overflow** is set to `error`.

Passed

Diagnostics > Data Validity > Saturate on overflow is set to `error`.

Verify 'Detect underflow' setting

Check whether **Diagnostics > Data Validity > Detect underflow** is set to `error`.

Passed

Diagnostics > Data Validity > Detect underflow is set to `error`.

Verify 'Detect loss of tunability' setting

Check whether **Diagnostics > Data Validity > Detect loss of tunability** is set to `error`.

Passed

Diagnostics > Data Validity > Detect loss of tunability is set to `error`.

Verify 'Allow symbolic dimension specification' setting

Check whether **Diagnostics > Allow symbolic dimension specification** is cleared.

Passed

Diagnostics > Allow symbolic dimension specification is cleared.

Verify 'Invalid root Inport/Outport block connection' setting
Check whether **Diagnostics > Model Referencing > Invalid root Inport/Outport block connection** is set to `error`.

Passed
Diagnostics > Model Referencing > Invalid root Inport/Outport block connection is set to `error`.

Verify 'Unexpected backtracking' setting
Check whether **Diagnostics > Stateflow > Unexpected backtracking** is set to `error`.

Passed
Diagnostics > Stateflow > Unexpected backtracking is set to `error`.

Verify 'Invalid input data access in chart initialization' setting
Check whether **Diagnostics > Stateflow > Invalid input data access in chart initialization** is set to `error`.

Passed
Diagnostics > Stateflow > Invalid input data access in chart initialization is set to `error`.

Verify 'No unconditional default transitions' setting
Check whether **Diagnostics > Stateflow > No unconditional default transitions** is set to `error`.

Passed
Diagnostics > Stateflow > No unconditional default transitions is set to `error`.

Verify 'Transition outside natural parent' setting
Check whether **Diagnostics > Stateflow > Transition outside natural parent** is set to `error`.

Passed
Diagnostics > Stateflow > Transition outside natural parent is set to `error`.

Verify 'Unreachable execution path' setting
Check whether **Diagnostics > Stateflow > Unreachable execution path** is set to `error`.

Passed
Diagnostics > Stateflow > Unreachable execution path is set to `error`.

Verify 'Undirected event broadcasts' setting
Check whether **Diagnostics > Stateflow > Undirected event broadcasts** is set to `error`.

Passed
Diagnostics > Stateflow > Undirected event broadcasts is set to `error`.

Verify 'Transition action specified before condition action' setting
Check whether **Diagnostics > Stateflow > Transition action specified before condition action** is set to `error`.

Passed
Diagnostics > Stateflow > Transition action specified before condition action is set to `error`.

Verify Bus signal treated as vector setting
Check whether **Diagnostics > Connectivity > Bus signal treated as vector** is set to `'error'`

Passed
Diagnostics > Connectivity > Bus signal treated as vector is set to `error`.

Check hardware implementation settings

Verify 'char' setting
Check whether **Hardware Implementation > char** is set to `8`.

Passed
Hardware Implementation > char is set to `8`.

Verify 'short' setting
Check whether **Hardware Implementation > short** is set to `16`.

Passed
Hardware Implementation > short is set to `16`.

Verify 'int' setting
Check whether **Hardware Implementation > int** is set to `32`.

Passed
Hardware Implementation > int is set to `32`.

Verify 'long' setting
Check whether **Hardware Implementation > long** is set to `32`.

Passed
Hardware Implementation > long is set to `32`.

Verify 'float' setting
Check whether **Hardware Implementation > float** is set to `32`.

Passed
Hardware Implementation > float is set to `32`.

Verify 'double' setting
Check whether **Hardware Implementation > double** is set to `64`.

Passed
Hardware Implementation > double is set to `64`.

Verify 'pointer' setting
Check whether **Hardware Implementation > pointer** is set to `32`.

Passed
Hardware Implementation > pointer is set to `32`.

Verify 'size_t' setting
Check whether **Hardware Implementation > size_t** is set to `32`.

Passed
Hardware Implementation > size_t is set to `32`.

Verify 'ptrdiff_t' setting
Check whether **Hardware Implementation > ptrdiff_t** is set to `32`.

Passed
Hardware Implementation > ptrdiff_t is set to `32`.

Verify 'native' setting
Check whether **Hardware Implementation > native** is set to `32`.

Passed
Hardware Implementation > native is set to `32`.

Verify 'Signed integer division rounds to' setting
Check whether **Hardware Implementation > Signed integer division rounds to** is set to `Zero`.

Passed
Hardware Implementation > Signed integer division rounds to is set to `Zero`.

Verify 'Shift right on a signed integer as arithmetic shift' setting
Check whether **Hardware Implementation > Shift right on a signed integer as arithmetic shift** is selected.

Passed
Hardware Implementation > Shift right on a signed integer as arithmetic shift is selected.

Verify 'Support long long' setting
Check whether **Hardware Implementation > Support long long** is cleared.

Passed
Hardware Implementation > Support long long is cleared.

Verify 'Test hardware is the same as production hardware' setting
Check whether **Hardware Implementation > Test hardware is the same as production hardware** is selected.

Passed
Hardware Implementation > Test hardware is the same as production hardware is selected.

Verify 'Device vendor' setting
Identify whether **Hardware Implementation > Device vendor** is not set to `ASIC/FPGA->ASIC/FPGA .`

Passed
Hardware Implementation > Device vendor is not set to `ASIC/FPGA->ASIC/FPGA .`

Check math and data types settings

Verify 'Implement logic signals as Boolean data (vs. double)' setting
Check whether **Math and Data Types > Implement logic signals as Boolean data (vs. double)** is selected.

Passed

Math and Data Types > Implement logic signals as Boolean data (vs. double) is selected.

Verify 'Use algorithms optimized for row-major array layout' setting

Check whether **Math and Data Types > Use algorithms optimized for row-major array layout** is cleared.

Passed

Math and Data Types > Use algorithms optimized for row-major array layout is cleared.

Check solver settings

Verify 'Type' setting

Check whether **Solver > Type** is set to `Fixed-step`.

Passed

Solver > Type is set to `Fixed-step`.

Verify 'Solver' setting

Check whether **Solver > Solver** is set to `FixedStepDiscrete`.

Passed

Solver > Solver is set to `FixedStepDiscrete`.

Verify 'Periodic sample time constraint' setting

Check whether **Solver > Periodic sample time constraint** is set to `Unconstrained or STIndependent`.

Passed

Solver > Periodic sample time constraint is set to `Unconstrained or STIndependent`.

Verify 'Automatically handle rate transition for data transfer' setting

Check whether **Solver > Automatically handle rate transition for data transfer** is cleared.

Passed

Solver > Automatically handle rate transition for data transfer is cleared.

Verify 'Allow tasks to execute concurrently on target' setting

Check whether **Solver > Allow tasks to execute concurrently on target** is cleared.

Passed

Solver > Allow tasks to execute concurrently on target is cleared.

Check for unconnected objects in the model

Check for unconnected objects

Identify unconnected lines, input ports, and output ports in the model or subsystem

Passed

There are no unconnected lines, input ports, or output ports in the model or subsystem.

Check system target file setting

Verify System target file setting

Check whether Code Generation > System target file is ert.tlc or a System target file derived from ERT

Passed

The target is ERT or derived from ERT.

Check function specification setting

Check model interface settings

Check whether the `Configure arguments for Step function prototype` setting in the Configure C Step Function Interface dialog box is cleared.

Passed

The `Configure arguments for Step function prototype` setting in the Configure C Step Function Interface dialog box is cleared.

Check for usage of fixed-point instrumentation

Verify usage of fixed-point instrumentation

Simultaneous usage of fixed-point instrumentation and block reduction can lead to incompatibilities during code inspection

Passed

Fixed-point instrumentation and block reduction are not used simultaneously.

Check for unsupported blocks

Check for blocks not supported by Simulink Code Inspector

Identify blocks that are not supported by Simulink Code Inspector

Passed

There are no unsupported blocks in this model or subsystem.

Check storage class for workspace variables

Check storage class for workspace variables referenced by the model

Identify workspace variables using unsupported storage class in the model

Passed

All of the workspace variables referenced by the model use supported storage classes.

Check GetSet storage class for workspace variables

Check storage class for workspace variables referenced by the model

Identify GetSet storage class workspace variables in the model that use unsupported specifications

Passed

All GetSet storage class workspace variables in the model meet a supported specification.

Check for sample times in the model

Check sample times

Identify continuous, asynchronous, multiple, union or variable sample times

Passed

No continuous, asynchronous, union, exported discrete or variable sample times were found.

Check usage of Sources blocks

Check Inport blocks

Identify Inport blocks that might impact compatibility with Simulink Code Inspector

Passed

All Inport blocks are compatible with Simulink Code Inspector.

Check Inport Shadow blocks

Identify Inport Shadow blocks that might impact compatibility with Simulink Code Inspector

Passed

No Inport Shadow blocks were found.

Check Constant blocks

Identify Constant blocks that might impact compatibility with Simulink Code Inspector

Passed

No Constant blocks were found.

Check Ground blocks

Identify Ground blocks that might impact compatibility with Simulink Code Inspector

Passed

No Ground blocks were found.

Check usage of Signal Routing blocks

Check Bus Creator blocks

Identify Bus Creator blocks that might impact compatibility with Simulink Code Inspector

Passed

No Bus Creator blocks were found.

Check Bus Selector blocks

Identify Bus Selector blocks that might impact compatibility with Simulink Code Inspector

Passed

No Bus Selector blocks were found.

Check Bus Assignment blocks

Identify Bus Assignment blocks that might impact compatibility with Simulink Code Inspector

Passed

No Bus Assignment blocks were found.

Check Data Store Memory blocks

Identify Data Store Memory blocks that might impact compatibility with Simulink Code Inspector

Passed

No Data Store Memory blocks were found.

Check Data Store Read blocks

Identify Data Store Read blocks that might impact compatibility with Simulink Code Inspector

Passed
No Data Store Read blocks were found.

Check Data Store Write blocks
Identify Data Store Write blocks that might impact compatibility with Simulink Code Inspector

Passed
No Data Store Write blocks were found.

Check From blocks
Identify From blocks that might impact compatibility with Simulink Code Inspector

Passed
No From blocks were found.

Check Goto blocks
Identify Goto blocks that might impact compatibility with Simulink Code Inspector

Passed
No Goto blocks were found.

Check Merge blocks
Identify Merge blocks that might impact compatibility with Simulink Code Inspector

Passed
No Merge blocks were found.

Check Switch blocks
Identify Switch blocks that might impact compatibility with Simulink Code Inspector

Passed
No Switch blocks were found.

Check Multiport Switch blocks
Identify Multiport Switch blocks that might impact compatibility with Simulink Code Inspector

Passed
No Multiport Switch blocks were found.

Check Mux blocks
Identify Mux blocks that might impact compatibility with Simulink Code Inspector

Passed
All Mux blocks are compatible with Simulink Code Inspector.

Check Demux blocks
Identify Demux blocks that might impact compatibility with Simulink Code Inspector

Passed
All Demux blocks are compatible with Simulink Code Inspector.

Check Selector blocks
Identify Selector blocks that might impact compatibility with Simulink Code Inspector

Passed
No Selector blocks were found.

Check Vector Concatenate blocks
Identify Vector Concatenate blocks that might impact compatibility with Simulink Code Inspector

Passed
No Vector Concatenate blocks were found.

Check usage of Math Operations blocks

Check Absolute blocks
Identify Absolute blocks that might impact compatibility with Simulink Code Inspector

Passed
No Absolute blocks were found.

Check Bias blocks
Identify Bias blocks that might impact compatibility with Simulink Code Inspector

Passed
No Bias blocks were found.

Check Gain blocks
Identify Gain blocks that might impact compatibility with Simulink Code Inspector

Passed
All Gain blocks are compatible with Simulink Code Inspector.

Check Math blocks
Identify Math blocks that might impact compatibility with Simulink Code Inspector

Passed
No Math blocks were found.

Check Product blocks
Identify Product blocks that might impact compatibility with Simulink Code Inspector

Passed
No Product blocks were found.

Check Sum blocks
Identify Sum blocks that might impact compatibility with Simulink Code Inspector

Passed
All Sum blocks are compatible with Simulink Code Inspector.

Check Trigonometry blocks
Identify Trigonometry blocks that might impact compatibility with Simulink Code Inspector

Passed
No Trigonometry blocks were found.

Check Minmax blocks
Identify Minmax blocks that might impact compatibility with Simulink Code Inspector

Passed
No Minmax blocks were found.

Check Rounding Function blocks
Identify Rounding Function blocks that might impact compatibility with Simulink Code Inspector

Passed
No Rounding Function blocks were found.

Check Reshape blocks
Identify Reshape blocks that might impact compatibility with Simulink Code Inspector

Passed
No Reshape blocks were found.

Check Sign blocks
Identify Sign blocks that might impact compatibility with Simulink Code Inspector

Passed
No Sign blocks were found.

Check Sqrt blocks
Identify Sqrt blocks that might impact compatibility with Simulink Code Inspector

Passed
No Sqrt blocks were found.

Check Assignment blocks
Identify Assignment blocks that might impact compatibility with Simulink Code Inspector

Passed
No Assignment blocks were found.

Check Polynomial blocks
Identify Polynomial blocks that might impact compatibility with Simulink Code Inspector

Passed
No Polynomial blocks were found.

Check DotProduct blocks
Identify DotProduct blocks that might impact compatibility with Simulink Code Inspector

Passed
No DotProduct blocks were found.

Check UnaryMinus blocks
Identify UnaryMinus blocks that might impact compatibility with Simulink Code Inspector

Passed

No UnaryMinus blocks were found.

Check usage of Signal Attributes blocks

Check Data Type Conversion blocks

Identify Data Type Conversion blocks that might impact compatibility with Simulink Code Inspector

Passed

No Data Type Conversion blocks were found.

Check Data Type Duplicate blocks

Identify Data Type Duplicate blocks that might impact compatibility with Simulink Code Inspector

Passed

No Data Type Duplicate blocks were found.

Check Data Type Propagation blocks

Identify Data Type Propagation blocks that might impact compatibility with Simulink Code Inspector

Passed

No Data Type Propagation blocks were found.

Check Initial Condition blocks

Identify Initial Condition blocks that might impact compatibility with Simulink Code Inspector

Passed

No Initial Condition blocks were found.

Check Signal Specification blocks

Identify Signal Specification blocks that might impact compatibility with Simulink Code Inspector

Passed

No Signal Specification blocks were found.

Check Signal Conversion blocks

Identify Signal Conversion blocks that might impact compatibility with Simulink Code Inspector

Passed

No Signal Conversion blocks were found.

Check Probe blocks
Identify Probe blocks that might impact compatibility with Simulink Code Inspector

Passed
No Probe blocks were found.

Check RateTransition blocks
Identify RateTransition blocks that might impact compatibility with Simulink Code Inspector

Passed
No RateTransition blocks were found.

Check Width blocks
Identify Width blocks that might impact compatibility with Simulink Code Inspector

Passed
No Width blocks were found.

Check Unit Conversion blocks
Identify Unit Conversion blocks that might impact compatibility with Simulink Code Inspector

Passed
No Unit Conversion blocks were found.

Check usage of Logical and Bit Operations blocks

Check Relational Operator blocks
Identify Relational Operator blocks that might impact compatibility with Simulink Code Inspector

Passed
No Relational Operator blocks were found.

Check Logic blocks
Identify Logic blocks that might impact compatibility with Simulink Code Inspector

Passed
No Logic blocks were found.

Check Bitwise Operator blocks
Identify Bitwise Operator blocks that might impact compatibility with Simulink Code Inspector

Passed
No Bitwise Operator blocks were found.

Check ArithShift blocks
Identify ArithShift blocks that might impact compatibility with Simulink Code Inspector

Passed
No ArithShift blocks were found.

Check Combinatorial Logic blocks
Identify Combinatorial Logic blocks that might impact compatibility with Simulink Code Inspector

Passed
No Combinatorial Logic blocks were found.

Check usage of Lookup Tables blocks

Check Lookup Table (n-D) blocks
Identify Lookup Table (n-D) blocks that might impact compatibility with Simulink Code Inspector

Passed
No Lookup Table (n-D) blocks were found.

Check PreLookup blocks
Identify PreLookup blocks that might impact compatibility with Simulink Code Inspector

Passed
No PreLookup blocks were found.

Check Interpolation Using Prelookup (n-D) blocks
Identify Interpolation Using Prelookup (n-D) blocks that might impact compatibility with Simulink Code Inspector

Passed
No Interpolation Using Prelookup (n-D) blocks were found.

Check usage of User-Defined Function blocks

Check S-Function blocks

Identify S-Function blocks that might impact compatibility with Simulink Code Inspector

Passed

No S-Function blocks were found.

Check Fcn blocks

Identify Fcn blocks that might impact compatibility with Simulink Code Inspector

Passed

No Fcn blocks were found.

Check usage of Ports and Subsystems blocks

Check Enable Port blocks

Identify Enable Port blocks that might impact compatibility with Simulink Code Inspector

Passed

No Enable Port blocks were found.

Check Model Reference blocks

Identify Model Reference blocks that might impact compatibility with Simulink Code Inspector

Passed

No Model Reference blocks were found.

Check Subsystem blocks

Identify Subsystem blocks that might impact compatibility with Simulink Code Inspector

Passed

All Subsystem blocks are compatible with Simulink Code Inspector.

Check Action Subsystem blocks

Identify Action Subsystem blocks that might impact compatibility with Simulink Code Inspector

Passed

No Action Subsystem blocks were found.

Check Trigger Port blocks

Identify Trigger Port blocks that might impact compatibility with Simulink Code Inspector

Passed

No Trigger Port blocks were found.

Check Action Port blocks

Identify Action Port blocks that might impact compatibility with Simulink Code Inspector

Passed

No Action Port blocks were found.

Check If blocks

Identify If blocks that might impact compatibility with Simulink Code Inspector

Passed

No If blocks were found.

Check Function-Call Generator blocks

Identify Function-Call Generator blocks that might impact compatibility with Simulink Code Inspector

Passed

No Function-Call Generator blocks were found.

Check Function-Call Split blocks

Identify Function-Call Split blocks that might impact compatibility with Simulink Code Inspector

Passed

No Function-Call Split blocks were found.

Check SwitchCase blocks

Identify SwitchCase blocks that might impact compatibility with Simulink Code Inspector

Passed

No SwitchCase blocks were found.

Check For Iterator blocks

Identify For Iterator blocks that might impact compatibility with Simulink Code Inspector

Passed

No For Iterator blocks were found.

Check For Each blocks

Identify For Each blocks that might impact compatibility with Simulink Code Inspector

Passed

No For Each blocks were found.

Check State Control blocks

Identify State Control blocks that might impact compatibility with Simulink Code Inspector

Passed

No State Control blocks were found.

Check usage of Discontinuities blocks

Check Saturate blocks

Identify Saturate blocks that might impact compatibility with Simulink Code Inspector

Passed

All Saturate blocks are compatible with Simulink Code Inspector.

Check Relay blocks

Identify Relay blocks that might impact compatibility with Simulink Code Inspector

Passed

No Relay blocks were found.

Check Dead Zone blocks

Identify Dead Zone blocks that might impact compatibility with Simulink Code Inspector

Passed

No Dead Zone blocks were found.

Check usage of Sinks blocks

Check Outport blocks

Identify Outport blocks that might impact compatibility with Simulink Code Inspector

Passed

All Outport blocks are compatible with Simulink Code Inspector.

Check Terminator blocks
Identify Terminator blocks that might impact compatibility with Simulink Code Inspector

Passed
No Terminator blocks were found.

Check usage of Discrete blocks

Check Unit Delay blocks
Identify Unit Delay blocks that might impact compatibility with Simulink Code Inspector

Passed
All Unit Delay blocks are compatible with Simulink Code Inspector.

Check Discrete Integrator blocks
Identify Discrete Integrator blocks that might impact compatibility with Simulink Code Inspector

Passed
No Discrete Integrator blocks were found.

Check Delay blocks
Identify Delay blocks that might impact compatibility with Simulink Code Inspector

Passed
No Delay blocks were found.

Check usage of root Outport blocks

Verify sample times
Identify root Outport blocks that specify a constant sample time.

Passed
No root Outport blocks specify a constant sample time.

Verify root Outports pass buses to parent models as structures
A root Outport block must pass a bus to a parent model as a structure so that Simulink does not introduce a hidden bus conversion block in the parent model.

Passed

All root outports pass buses as structures.

Check for unsupported Signal Conversion blocks automatically inserted at signals entering block input ports

Verify no unsupported Signal Conversion blocks are automatically inserted at signals entering block inports

Verification of Signal Conversion blocks that have been automatically inserted is not supported

Passed

No unsupported Signal Conversion blocks are automatically inserted at signals entering block inports.

Check usage of buses

Check for automatic conversion between virtual to non-virtual buses.

Verify that there is no automatic conversion from virtual to non-virtual buses.

Passed

There is no automatic conversion between virtual and non-virtual buses.

Verify that no blocks in the model perform an unsupported operation on a bus

Verify that no non-virtual blocks in the model operate on a virtual bus, that no Bus Assignment blocks operate on a non-virtual bus

Passed

No blocks in the model perform an unsupported operation on a bus.

Check for usage of synthesized local data stores

Verify synthesized local data store usage

Identify signal objects in the model workspace that are referenced as synthesized local data stores by Data Store Read or Data Store Write blocks. If Simulink software finds such a signal object, it creates a hidden Data Store Memory block at the model's root level. This model is not compatible with Simulink Code Inspector.

Passed

There are no signal objects in the model workspace referenced as synthesized local data stores by Data Store Read or Data Store Write blocks in this model.

Check usage of global data stores

Verify global data store usage

Global data store memory blocks may not be used unless parameters are inlined, and their InitialValue is not a tunable parameter

Passed

There is no unsupported usage of global data stores.

Check global data stores' name shadow

Verify global data store's name shadow

Global data store memory blocks may not be used if they are shadowed by local data store memory blocks

Passed

There is no shadowed usage of global data stores

Check for root Outport blocks being conditionally assigned

Verify that root outports are not assigned conditionally

Code verification is not supported for submodels for which root outports are assigned by conditionally executed subsystems.

Passed

The model satisfies the check.

Check conditional input branch execution setting

Verify conditional input branch execution setting

Check whether 'Signal storage reuse' and 'Enable local block outputs' are set when conditional input branch execution is set

Passed

Conditional input branch execution setting is compatible.

Check usage of Stateflow blocks

Check Stateflow blocks

Identify Stateflow blocks that might impact compatibility with Simulink Code Inspector

Passed

No Stateflow blocks were found.

Check for Stateflow machine data

All Stateflow data must be parented by a Stateflow chart

Simulink Code Inspector does not support Stateflow data of machine scope

Passed

No Stateflow data is of machine scope.

Check for Stateflow machine events

All Stateflow events must be parented by a Stateflow chart

Simulink Code Inspector does not support Stateflow events of machine scope

Passed

No Stateflow events are of machine scope.

Check usage of Stateflow charts

No Stateflow charts were found.

Check usage of Stateflow data

No Stateflow data were found.

Check usage of Stateflow events

No Stateflow events were found.

Check usage of Stateflow states

No Stateflow states were found.

Check usage of Stateflow junctions

No Stateflow junctions were found.

Check usage of Stateflow transitions

No Stateflow transitions were found.

Check usage of Stateflow graphical functions

No Stateflow graphical functions were found.

Check usage of Stateflow truth tables

No Stateflow truth tables were found.

Check Loop unrolling threshold setting

Verify Loop unrolling threshold setting

Check whether 'Loop unrolling threshold' is set to a value such that no partially unrolled loops are generated.

Passed

Loop unrolling threshold setting is compatible.

Check destinations of If and Switchcase blocks

Check destination Action subsystems of If and Switchcase blocks

Check that Action subsystems connected to same If or Switch Case block uniformly combine or separate their output and update code

Passed

No Action subsystems that violated the above check were found

---

Check for root Outport blocks that have non-auto storage class

Verify that the storage class of root outports is supported

Code verification is not supported for submodels with root outports of non-auto storage class if the parameter 'Pass reusable subsystem outputs as' is set to 'Individual arguments'.

Passed

The model satisfies the check.

Check for Terminator blocks connected to Model Reference block outports

Check for Model Reference block connectivity

Identify Model Reference blocks that are connected to Terminator blocks.

Passed

Not all outports of Model Reference blocks are connected to Terminator blocks.

Check for unsupported propagation of initial condition values

Check for unsupported propagation of initial condition values

Check if any block propagates initial condition during first time initialization

Passed

No unsupported propagation of initial condition values detected

---

Check data type replacement names

Identify replacement names that are not a Simulink Name or a Simulink.AliasType

Identify replacement names that are not a Simulink Name or a Simulink.AliasType

Passed

All replacement names are a Simulink Name or a Simulink.AliasType

---

Check usage of MATLAB Function Blocks

No MATLAB Function Blocks were found

Check usage of Data in MATLAB Functions

No Data in MATLAB Functions were found

Check usage of Code in MATLAB Functions

No Code in MATLAB Functions were found

Check MATLAB Code Analyzer messages

Check MATLAB code used in MATLAB Function blocks

Passed

No MATLAB Function blocks found

Check MATLAB functions defined in Stateflow charts

Passed

No MATLAB functions defined in Stateflow charts found

Check called MATLAB functions

Passed

No external MATLAB functions found

Check for multiple sample times in model used as a model reference target

Check for sample times in model used as model reference target

Identify models used as model reference targets that have multiple sample times

Passed

Model used as model reference target does not have multiple sample times

---

Check Treat each discrete rate as a separate task setting

Verify Treat each discrete rate as a separate task setting

Check whether 'Treat each discrete rate as a separate task' is selected for a model with multiple discrete rates.

Passed

'Treat each discrete rate as a separate task' setting is compatible. This check does not impact a model that has a single rate.

Check model for commented out blocks

Check for commented out blocks in the model

Identify blocks in the model that are commented out

Passed

There are no commented out blocks in the model

Check model for instrumented signals

Check for instrumented signals in the model

Identify signals in the model that are instrumented

Passed

There are no instrumented signals in the model

Check model for void_void subsystems that use the same function name

Check function names used by void_void subsystems in the model

Identify void_void subsystems in the model that use the same function name

Passed

Void_void subsystems in the model use unique function names

Check n-D Lookup Table blocks for incompatible breakpoint data type

Check n-D Lookup Table blocks for incompatible breakpoint data type

Passed

n-D Lookup Table blocks have compatible breakpoint data type

Check model for reusable subsystems that use the same function interfaces

Check the model for reusable subsystems with the same function interfaces

Identify reusable subsystems with the same function interfaces that are from different library blocks

Passed

Reusable subsystems with the same function interfaces are from the same library blocks

---

Check for usage of shared synthesized local data stores

Check for unsupported usage of shared synthesized local Data Store Memory blocks

Identify unsupported hidden data store memory blocks inserted for shared synthesized local data store memory blocks

Passed

There are no unsupported hidden data store memory blocks inserted for shared synthesized local data store memory blocks.

Check the code generation folder structure for the model

Check the code generation folder structure for the model

Check that the code generation folder structure for the model is supported

Passed

The code generation folder structure for the model is supported

---

Check for unsupported Code Mapping settings

Check for unsupported usage of Storage Class on the Data Defaults tab of the Code Mapping Editor.

Identify unsupported Storage Class settings for model element categories on the Data Defaults tab of the Code Mapping Editor.

Passed

There is no unsupported Storage Class setting for model element categories on the Data Defaults tab of the Code Mapping Editor.

Check model for compiled and graphical block sorted order

Check for matching compiled and graphical block sorted order in the model

Identify blocks in the compiled block list of the model that do not match graphical block sorted order.

Passed

All blocks in the compiled block list follow graphical sorted order in the model