

Model Advisor Report - Integrated_Model.slx

Simulink version: 10.5
System: Integrated_Model
Treat as Referenced Model: off

Model version: 1.6
Current run: 26-Mar-2022 14:33:06

Run Summary

Incomplete	Failed	Warning	Justified	Passed	Not Run	Total
0	17	259	0	499	1088	1863

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Model Advisor

1 By Product 0 Failed 0 Warning 0 Justified 499 Passed 1088 Not Run 1863

1.1 Embedded Coder 0 Failed 0 Warning 0 Justified 0 Passed 28 Not Run

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 standardsNot Run

Check for blocks not recommended for secure coding standardsNot Run

Identify questionable subsystem settingsNot Run

Check for blocks not supported for row-major code generationNot Run

Identify TLC S-Functions with unset array layoutNot Run

Identify blocks that generate expensive fixed-point and saturation codeNot Run

Check for missing const qualifiers in model functionsNot Run

Check bus object names that are used as bus element namesNot Run

Identify questionable fixed-point operationsNot Run

Identify blocks that generate expensive rounding codeNot Run

Check for bitwise operations on signed integersNot Run

Check for recursive function callsNot Run

Check for equality and inequality operations on floating-point valuesNot Run

Check integer word lengthsNot Run

1.2 Simulink 0 0 0 0 42

Check optimization settingsNot Run

Identify unconnected lines, input ports, and output portsNot Run

Check root model Import block specificationsNot Run

Check diagnostic settings ignored during accelerated model reference simulation

Not Run

Check for parameter tunability information ignored for referenced modelsNot Run

Check for implicit signal resolutionNot Run

Check for optimal bus virtualityNot Run

Check for calls to `siDataTypeAndScale()`Not Run

Check for Discrete-Time Integrator blocks with initial condition uncertaintyNot Run

Identify disabled library linksNot Run

Identify parameterized library linksNot Run

Identify unresolved library linksNot Run

Identify configurable subsystem blocks in the model for converting to variant subsystem blocks.Not Run

Check usage of function-call connectionsNot Run

Check and update mask image display commands with unnecessary `imread()` function callsNot Run

Check and update mask to affirm icon drawing commands dependency on mask workspaceNot Run

Identify Environment Controller blocks to be replaced with Variant Source blocksNot Run

Runtime diagnostics for S-functionsNot Run

Check if Read/Write diagnostics are enabled for Data Store blocksNot Run

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

Check Model History propertiesNot Run

Check S-functions in the modelNot 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

1.3 Simulink Coder **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

1.4 AUTOSAR Blockset **Check compatibility of AUTOSAR Interpolation Routines**

Not Run

Check model configuration parameters for AUTOSAR compliance

Not Run

1.5 HDL Coder **1.5.1 Checks for blocks and block settings** **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 sourcesNot Run

Check for unsupported storage class for signal objectsNot Run

Check for Stateflow chart settingsNot Run

Check for Trigonometric Function block for LUT-based approximation methodNot Run

Check for large matrix operationsNot Run

Check for blocks that have nonzero output latencyNot Run

1.5.2 Industry standard checks 0 0 0 0 0 11**Check architecture name**Not Run

Check clock settingsNot Run

Check clock, reset, and enable signalsNot Run

Check file extensionNot Run

Check genericsNot Run

Check naming conventionsNot Run

Check package file namesNot Run

Check signal and port namesNot Run

Check entity and architectureNot Run

Check module/entity namesNot Run

Check top-level subsystem/port names

Not Run

1.5.3 Model configuration checks **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

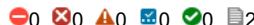
Not Run

Check for visualization settings

Not Run

Check algebraic loops

Not Run

1.5.4 Checks for ports and subsystems **Check initial conditions of enabled and triggered subsystems**

Not Run

Check for invalid top level subsystem

Not Run

1.5.5 Native Floating Point checks **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

1.6 Simscape 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

1.7 Simulink PLC Coder 0 0 0 24

1.7.1 Industry standard checks 0 0 0 7

Define the names to avoid

Not Run

Define the use of case (capitals)

Not Run

Define the maximum variable name length

Not Run

Comments must describe the intention of the code

Not Run

Avoid nested comments

Not Run

Define maximum number of input/output/in-out variables of a POU

Not Run

Define type prefixes for variables (if used)

Not Run

1.7.2 Checks for blocks and block settings 0 0 0 8

Check if model uses event based blocks

Not Run

Check if model uses probe blocks

Not Run

Check if model uses environment controller blocks

Not Run

Check Stateflow chart update

Not Run

Check issues with integrator blocks

Not Run

Check if model can generate testbenchNot Run

Check function packaging configurationNot Run

Check trigonometric blocks

Not Run

1.7.3 Model configuration checks 0 0 0 0 9**Check if model uses unsupported blocks**Not Run

Check Data Store Memory blocksNot Run

Check model for Stateflow messagesNot Run

Check if signal lines are configured properlyNot Run

Check if model uses row major algorithmsNot Run

Check model mask parametersNot Run

Check if model uses machine parented dataNot Run

Check if model uses custom codeNot Run

Check model tunable parameters

Not Run

1.8 Simulink Check 0 0 0 0 459**1.8.1 Modeling Standards** 0 0 0 0 449**1.8.1.1 DO-178C/DO-331 Checks** 0 0 0 0 95**Check usage of standardized MATLAB function headers**Not Run

Check for MATLAB Function interfaces with inherited propertiesNot Run

Check MATLAB Function metricsNot Run

Check MATLAB Code Analyzer messages

Not Run

Check if/elseif/else patterns in MATLAB Function blocks

Not Run

Check switch statements in MATLAB Function blocks

Not Run

Check MATLAB functions not supported for code generation

Not Run

Check state machine type of Stateflow charts

Not Run

Check Stateflow charts for ordering of states and transitions

Not Run

Check Stateflow debugging options

Not Run

Check Stateflow charts for transition paths that cross parallel state boundaries

Not Run

Check for inappropriate use of transition paths

Not Run

Check naming of ports in Stateflow charts

Not Run

Check scoping of Stateflow data objects

Not Run

Check usage of While Iterator blocks

Not Run

Check usage of For and While Iterator subsystems

Not Run

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

Not Run

Check for inconsistent vector indexing methods

Not Run

Check usage of variant blocks

Not Run

Check for root Imports with missing properties

Not Run

Check model file name

Not Run

Check usage of lookup table blocks

Not Run

Check safety-related solver settings for simulation time

Not Run

Check Stateflow charts for uniquely defined data objects

Not Run

Check global variables in graphical functions

Not Run

Check usage of Gain blocks

Not Run

Check for model elements that do not link to requirements

Not Run

Check safety-related settings for hardware implementation

Not Run

Check for parameter tunability ignored for referenced models

Not Run

Check for disabled and parameterized library links

Not Run

Check safety-related diagnostic settings for data store memory

Not Run

Check safety-related diagnostic settings for saving

Not Run

Check safety-related model referencing settings

Not Run

Check safety-related solver settings for solver options

Not Run

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

Not Run

Check safety-related diagnostic settings for solvers

Not Run

Check safety-related diagnostic settings for sample time

Not Run

Check safety-related optimization settings for logic signals

Not Run

Check safety-related block reduction optimization settings

Not Run

Check safety-related optimization settings for application lifespan

Not Run

Check safety-related optimization settings for data initializationNot Run

Check safety-related optimization settings for data type conversionsNot Run

Check safety-related optimization settings for division arithmetic exceptionsNot Run

Check safety-related optimization settings for specified minimum and maximum valuesNot Run

Check safety-related code generation settings for commentsNot Run

Check safety-related code generation interface settingsNot Run

Check safety-related code generation settings for code styleNot Run

Check safety-related code generation identifier settingsNot Run

Check safety-related diagnostic settings for compatibilityNot Run

Check safety-related diagnostic settings for parametersNot Run

Check safety-related diagnostic settings for Merge blocksNot Run

Check safety-related diagnostic settings for model initializationNot Run

Check safety-related diagnostic settings for data used for debuggingNot Run

Check safety-related diagnostic settings for signal connectivityNot Run

Check safety-related diagnostic settings for bus connectivityNot Run

Check safety-related diagnostic settings that apply to function-call connectivityNot Run

Check safety-related diagnostic settings for type conversionsNot Run

Check safety-related diagnostic settings for model referencingNot Run

Check safety-related diagnostic settings for Stateflow

Not Run

█ **Check safety-related diagnostic settings for signal data**

Not Run

█ **Check safety-related diagnostic settings for variants**

Not Run

█ **Display model version information**

Not Run

█ **Check usage of relational operators in MATLAB Function blocks**

Not Run

█ **Check usage of logical operators and functions in MATLAB Function blocks**

Not Run

█ **Check type and size of condition expressions**

Not Run

█ **Metrics for generated code complexity**

Not Run

█ **Check Stateflow charts for strong data typing**

Not Run

█ **Check assignment operations in Stateflow charts**

Not Run

█ **Check Stateflow charts for unary operators**

Not Run

█ **Check usage of Abs blocks**

Not Run

█ **Check usage of For Iterator blocks**

Not Run

█ **Check usage of If blocks and If Action Subsystem blocks**

Not Run

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

Not Run

█ **Check usage of conditionally executed subsystems**

Not Run

█ **Check relational comparisons on floating-point signals**

Not Run

█ **Check usage of Relational Operator blocks**

Not Run

█ **Check usage of Logical Operator blocks**

Not Run

Check usage of bitwise operations

Not Run

Check usage of Merge blocks

Not Run

Check data types for blocks with index signals

Not Run

Check for root Imports with missing range definitions

Not Run

Check for root Outports with missing range definitions

Not Run

Check usage of Assignment blocks

Not Run

Check model object names

Not Run

Check usage of Signal Routing blocks

Not Run

Check for length of user-defined object names

Not Run

Check data type of loop control variables

Not Run

Check usage of bit-shift operations

Not Run

Check usage of recursions

Not Run

Check usage of remainder and reciprocal operations

Not Run

Check usage of square root operations

Not Run

Check usage of log and log10 operations

Not Run

Check usage of Reciprocal Sqrt blocks

Not Run

Check for divide-by-zero calculations

Not Run

Check for unreachable and dead code

Not Run

☒ 1.8.1.2 IEC 61508, IEC 62304, ISO 26262, ISO 25119, EN 50128 and EN 50657 Checks ⚡0 ✖0 ⚠0 ⚡0 ✓0 ⌂97

☒ Check usage of standardized MATLAB function headers

Not Run

☒ Check for MATLAB Function interfaces with inherited properties

Not Run

☒ Check MATLAB Function metrics

Not Run

☒ Check MATLAB Code Analyzer messages

Not Run

☒ Check if/elseif/else patterns in MATLAB Function blocks

Not Run

☒ Check switch statements in MATLAB Function blocks

Not Run

☒ Check MATLAB functions not supported for code generation

Not Run

☒ Check state machine type of Stateflow charts

Not Run

☒ Check Stateflow charts for ordering of states and transitions

Not Run

☒ Check Stateflow debugging options

Not Run

☒ Check Stateflow charts for transition paths that cross parallel state boundaries

Not Run

☒ Check for inappropriate use of transition paths

Not Run

☒ Check naming of ports in Stateflow charts

Not Run

☒ Check scoping of Stateflow data objects

Not Run

☒ Check usage of While Iterator blocks

Not Run

☒ Check usage of For and While Iterator subsystems

Not Run

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

Not Run

☒ Check for inconsistent vector indexing methods

Not Run

Check usage of variant blocks

Not Run

Check for root Imports with missing properties

Not Run

Check model file name

Not Run

Check usage of lookup table blocks

Not Run

Check safety-related solver settings for simulation time

Not Run

Check Stateflow charts for uniquely defined data objects

Not Run

Check global variables in graphical functions

Not Run

Check usage of Gain blocks

Not Run

Check for model elements that do not link to requirements

Not Run

Check safety-related settings for hardware implementation

Not Run

Check for parameter tunability ignored for referenced models

Not Run

Check for disabled and parameterized library links

Not Run

Check safety-related diagnostic settings for data store memory

Not Run

Check safety-related diagnostic settings for saving

Not Run

Check safety-related model referencing settings

Not Run

Check safety-related solver settings for solver options

Not Run

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

Not Run

Check safety-related diagnostic settings for solvers

Not Run

Check safety-related diagnostic settings for sample time

Not Run

Check safety-related optimization settings for logic signals

Not Run

Check safety-related block reduction optimization settings

Not Run

Check safety-related optimization settings for application lifespan

Not Run

Check safety-related optimization settings for data initialization

Not Run

Check safety-related optimization settings for data type conversions

Not Run

Check safety-related optimization settings for division arithmetic exceptions

Not Run

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

Not Run

Check safety-related code generation settings for comments

Not Run

Check safety-related code generation interface settings

Not Run

Check safety-related code generation settings for code style

Not Run

Check safety-related code generation identifier settings

Not Run

Check safety-related diagnostic settings for compatibility

Not Run

Check safety-related diagnostic settings for parameters

Not Run

Check safety-related diagnostic settings for Merge blocks

Not Run

Check safety-related diagnostic settings for model initialization

Not Run

Check safety-related diagnostic settings for data used for debugging

Not Run

Check safety-related diagnostic settings for signal connectivity

Not Run

Check safety-related diagnostic settings for bus connectivityNot Run

Check safety-related diagnostic settings that apply to function-call connectivityNot Run

Check safety-related diagnostic settings for type conversionsNot Run

Check safety-related diagnostic settings for model referencingNot Run

Check safety-related diagnostic settings for StateflowNot Run

Check safety-related diagnostic settings for signal dataNot Run

Check safety-related diagnostic settings for variantsNot Run

Display model metrics and complexity reportNot Run

Check for unconnected objectsNot Run

Check usage of relational operators in MATLAB Function blocksNot Run

Check usage of logical operators and functions in MATLAB Function blocksNot Run

Check type and size of condition expressionsNot Run

Metrics for generated code complexityNot Run

Check Stateflow charts for strong data typingNot Run

Check assignment operations in Stateflow chartsNot Run

Check Stateflow charts for unary operatorsNot Run

Check usage of Abs blocksNot Run

Check usage of For Iterator blocksNot Run

Check usage of If blocks and If Action Subsystem blocks

Not Run

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

Not Run

■ **Check usage of conditionally executed subsystems**

Not Run

■ **Check relational comparisons on floating-point signals**

Not Run

■ **Check usage of Relational Operator blocks**

Not Run

■ **Check usage of Logical Operator blocks**

Not Run

■ **Check usage of bitwise operations**

Not Run

■ **Check usage of Merge blocks**

Not Run

■ **Check data types for blocks with index signals**

Not Run

■ **Check for root Inputs with missing range definitions**

Not Run

■ **Check for root Outports with missing range definitions**

Not Run

■ **Check usage of Assignment blocks**

Not Run

■ **Check model object names**

Not Run

■ **Check usage of Signal Routing blocks**

Not Run

■ **Check for length of user-defined object names**

Not Run

■ **Check data type of loop control variables**

Not Run

■ **Check usage of bit-shift operations**

Not Run

■ **Display configuration management data**

Not Run

■ **Check usage of recursions**

Not Run

Check usage of remainder and reciprocal operations

Not Run

Check usage of square root operations

Not Run

Check usage of log and log10 operations

Not Run

Check usage of Reciprocal Sqrt blocks

Not Run

Check for divide-by-zero calculations

Not Run

Check for unreachable and dead code

Not Run

1.8.1.3 MAB Checks 0 0 0 0 142

Check for prohibited sink blocks

Not Run

Check whether block names appear below blocks

Not Run

Check for mixing basic blocks and subsystems

Not Run

Check usage of tunable parameters in blocks

Not Run

Check model diagnostic parameters

Not Run

Check the display attributes of block names

Not Run

Check display for port blocks

Not Run

Check usage of Relational Operator blocks

Not Run

Check for nondefault block attributes

Not Run

Check signal line labels

Not Run

Check for propagated signal labels

Not Run

Check return value assignments in Stateflow graphical functions

Not Run

Check for pointers in Stateflow charts

Not Run

Check logical expressions in If blocks

Not Run

Check for Simulink diagrams using nonstandard display attributes

Not Run

Check input and output settings of MATLAB Functions

Not Run

Check MATLAB code for global variables

Not Run

Check use of Simulink in Stateflow charts

Not Run

Check use of default variants

Not Run

Check use of single variable variant conditionals

Not Run

Check usage of restricted variable names

Not Run

Check usage of character vector inside MATLAB Function block

Not Run

Check usage of recommended patterns for Switch/Case statements

Not Run

Check the number of function calls in MATLAB Function blocks

Not Run

Check lines of code in MATLAB Functions

Not Run

Check nested conditions in MATLAB Functions

Not Run

Check Implement logic signals as Boolean data (vs. double)

Not Run

Check usage of Discrete-Time Integrator block

Not Run

Check default transition placement in Stateflow charts

Not Run

Check for avoiding algebraic loops between subsystems

Not Run

Check for missing ports in Variant Subsystems

Not Run

Check for cascaded Unit Delay blocks

Not Run

Check file names

Not Run

Check folder names

Not Run

Check port block names

Not Run

Check subsystem names

Not Run

Check character usage in block names

Not Run

Check definition of signal labels

Not Run

Check Signal name propagation

Not Run

Check Signed Integer Division Rounding mode

Not Run

Check usage of State names

Not Run

Check usage of Stateflow comments

Not Run

Check execution timing for default transition path

Not Run

Check usage of Merge block

Not Run

Check usage of internal transitions in Stateflow states

Not Run

Check usage of transition conditions in Stateflow transitions

Not Run

Check block orientation

Not Run

Check usage of parentheses in Stateflow transitions

Not Run

Check usable number for first indexNot Run

Check character usage in signal names and bus namesNot Run

Check uniqueness of Stateflow State and Data namesNot Run

Check length of model file nameNot Run

Check length of folder name at every level of model pathNot Run

Check length of subsystem namesNot Run

Check length of Import and Outport namesNot Run

Check length of signal and bus namesNot Run

Check length of block namesNot Run

Check entry formatting in State blocks in Stateflow chartsNot Run

Check prohibited combination of state action and flow chartNot Run

Check repetition of Action typesNot Run

Check for unused data in Stateflow ChartsNot Run

Check updates to variables used in state transition conditionsNot Run

Check condition actions and transition actions in StateflowNot Run

Check uniqueness of State namesNot Run

Check if blocks are shaded in the modelNot Run

Check operator order of Product blocksNot Run

Check icon shape of Logical Operator blocks

Not Run

█ **Check if tunable block parameters are defined as named constants**

Not Run

█ **Check default/else case in Switch Case blocks and If blocks**

Not Run

█ **Check usage of internal transition**

Not Run

█ **Check usage of parallel states**

Not Run

█ **Check scope of data in parallel states**

Not Run

█ **Check indentation of code in Stateflow states**

Not Run

█ **Check for unexpected backtracking in state transitions**

Not Run

█ **Check usage of Lookup Tables**

Not Run

█ **Check for parentheses in Fcn block expressions**

Not Run

█ **Check for usage of text inside states**

Not Run

█ **Check for unconnected objects in Stateflow Charts**

Not Run

█ **Check position of label string in Stateflow transition**

Not Run

█ **Check duplication of Simulink Data names**

Not Run

█ **Check Model Description**

Not Run

█ **Check Stateflow chart action language**

Not Run

█ **Check character usage in Stateflow data names**

Not Run

█ **Check length of Stateflow data name**

Not Run

█ **Check diagnostic settings for incorrect calculation results**

Not Run

Check usage of transitions to external states

Not Run

Check order of state action types

Not Run

Check usage of numeric literals in Stateflow

Not Run

Check position of comments in transition labels

Not Run

Check trigger signal names

Not Run

Check usage of unconditional transitions in flow charts

Not Run

Check for comments in unconditional transitions

Not Run

Check output data type of operation blocks

Not Run

Check terminal junctions in Stateflow

Not Run

Check if state action type 'exit' is used in the model

Not Run

Check for consistency in model element names

Not Run

Check usage of graphical functions in Stateflow

Not Run

Check for sample time setting

Not Run

Check usage of Sum blocks

Not Run

Check Indexing Mode

Not Run

Check position of signal labels

Not Run

Check position of Import and Outport blocks

Not Run

Check definition of Stateflow events

Not Run

Check for usage of Data Store Memory blocksNot Run

Check for MATLAB expressions in Stateflow blocksNot Run

Check definition of Stateflow dataNot Run

Check signal flow in modelNot Run

Check Stateflow transition appearanceNot Run

Check position of conditional blocks and iterator blocksNot Run

Check signal line connectionsNot Run

Check usage of events in Stateflow chartsNot Run

Check Model font settingsNot Run

Check usage of Simulink functions in StateflowNot Run

Check for exclusive states in state machinesNot Run

Check for unconnected signal lines and blocksNot Run

Check transitions in Stateflow flow chartsNot Run

Check scope of From and Goto blocksNot Run

Check usage of Switch blocksNot Run

Check usage of unary minus operations in Stateflow chartsNot Run

Check usage of floating-point expressions in Stateflow chartsNot Run

Check usage of enumerated valuesNot Run

Check for names of Stateflow ports and associated signals

Not Run

Check settings for data ports in Multiport Switch blocks

Not Run

Check input and output datatype for Switch blocks

Not Run

Check usage of fixed-point data type with non-zero bias

Not Run

Check signs of input signals in product blocks

Not Run

Check type setting by data objects

Not Run

Check usage of the Saturation blocks

Not Run

Check prohibited comparison operation of logical type signals

Not Run

Check usage of Memory and Unit Delay blocks

Not Run

Check character usage in parameter names

Not Run

Check length of parameter names

Not Run

Check undefined initial output for conditional subsystems

Not Run

Check comparison of floating point types in Simulink

Not Run

Check unused data in Simulink Model

Not Run

Check for implicit type casting in Stateflow

Not Run

Check for use of C-style comment symbols

Not Run

Check Stateflow operators

Not Run

Check fundamental logical and numerical operations

Not Run

Check usage of vector and bus signals

Not Run

Check connections between structural subsystems

Not Run

Check for division by zero in Simulink

Not Run

1.8.1.4 JMAAB Checks 0 0 0 0 115

Check usage of tunable parameters in blocks

Not Run

Check use of single variable variant conditionals

Not Run

Check usage of character vector inside MATLAB Function block

Not Run

Check usage of Discrete-Time Integrator block

Not Run

Check default transition placement in Stateflow charts

Not Run

Check for avoiding algebraic loops between subsystems

Not Run

Check for missing ports in Variant Subsystems

Not Run

Check for cascaded Unit Delay blocks

Not Run

Check file names

Not Run

Check folder names

Not Run

Check port block names

Not Run

Check subsystem names

Not Run

Check character usage in block names

Not Run

Check definition of signal labels

Not Run

Check Signal name propagation

Not Run

Check Signed Integer Division Rounding mode

Not Run

█ **Check usage of State names**

Not Run

█ **Check usage of Stateflow comments**

Not Run

█ **Check execution timing for default transition path**

Not Run

█ **Check usage of Merge block**

Not Run

█ **Check usage of internal transitions in Stateflow states**

Not Run

█ **Check usage of transition conditions in Stateflow transitions**

Not Run

█ **Check block orientation**

Not Run

█ **Check usage of parentheses in Stateflow transitions**

Not Run

█ **Check usable number for first index**

Not Run

█ **Check character usage in signal names and bus names**

Not Run

█ **Check uniqueness of Stateflow State and Data names**

Not Run

█ **Check length of model file name**

Not Run

█ **Check length of folder name at every level of model path**

Not Run

█ **Check length of subsystem names**

Not Run

█ **Check length of Import and Outport names**

Not Run

█ **Check length of signal and bus names**

Not Run

█ **Check length of block names**

Not Run

█ **Check entry formatting in State blocks in Stateflow charts**

Not Run

Check prohibited combination of state action and flow chart

Not Run

Check repetition of Action types

Not Run

Check for unused data in Stateflow Charts

Not Run

Check updates to variables used in state transition conditions

Not Run

Check condition actions and transition actions in Stateflow

Not Run

Check uniqueness of State names

Not Run

Check if blocks are shaded in the model

Not Run

Check operator order of Product blocks

Not Run

Check icon shape of Logical Operator blocks

Not Run

Check if tunable block parameters are defined as named constants

Not Run

Check default/else case in Switch Case blocks and If blocks

Not Run

Check usage of internal transition

Not Run

Check usage of parallel states

Not Run

Check scope of data in parallel states

Not Run

Check indentation of code in Stateflow states

Not Run

Check for unexpected backtracking in state transitions

Not Run

Check usage of Lookup Tables

Not Run

Check for parentheses in Fcn block expressions

Not Run

Check for usage of text inside states

Not Run

Check for unconnected objects in Stateflow Charts

Not Run

Check position of label string in Stateflow transition

Not Run

Check duplication of Simulink Data names

Not Run

Check Model Description

Not Run

Check Stateflow chart action language

Not Run

Check character usage in Stateflow data names

Not Run

Check length of Stateflow data name

Not Run

Check diagnostic settings for incorrect calculation results

Not Run

Check usage of transitions to external states

Not Run

Check order of state action types

Not Run

Check usage of numeric literals in Stateflow

Not Run

Check position of comments in transition labels

Not Run

Check trigger signal names

Not Run

Check usage of unconditional transitions in flow charts

Not Run

Check for comments in unconditional transitions

Not Run

Check output data type of operation blocks

Not Run

Check terminal junctions in Stateflow

Not Run

Check if state action type 'exit' is used in the model

Not Run

Check for consistency in model element names

Not Run

Check usage of graphical functions in Stateflow

Not Run

Check for sample time setting

Not Run

Check usage of Sum blocks

Not Run

Check Indexing Mode

Not Run

Check position of signal labels

Not Run

Check position of Import and Outport blocks

Not Run

Check definition of Stateflow events

Not Run

Check for usage of Data Store Memory blocks

Not Run

Check for MATLAB expressions in Stateflow blocks

Not Run

Check definition of Stateflow data

Not Run

Check signal flow in model

Not Run

Check Stateflow transition appearance

Not Run

Check position of conditional blocks and iterator blocks

Not Run

Check signal line connections

Not Run

Check usage of events in Stateflow charts

Not Run

Check Model font settings

Not Run

Check usage of Simulink functions in Stateflow

Not Run

Check for exclusive states in state machines

Not Run

Check for unconnected signal lines and blocks

Not Run

Check transitions in Stateflow flow charts

Not Run

Check scope of From and Goto blocks

Not Run

Check usage of floating-point expressions in Stateflow charts

Not Run

Check usage of enumerated values

Not Run

Check settings for data ports in Multiport Switch blocks

Not Run

Check input and output datatype for Switch blocks

Not Run

Check usage of fixed-point data type with non-zero bias

Not Run

Check signs of input signals in product blocks

Not Run

Check type setting by data objects

Not Run

Check usage of the Saturation blocks

Not Run

Check prohibited comparison operation of logical type signals

Not Run

Check usage of Memory and Unit Delay blocks

Not Run

Check character usage in parameter names

Not Run

Check length of parameter names

Not Run

Check undefined initial output for conditional subsystems

Not Run

Check comparison of floating point types in Simulink

Not Run

Check unused data in Simulink ModelNot Run

Check for implicit type casting in StateflowNot Run

Check for use of C-style comment symbolsNot Run

Check Stateflow operatorsNot Run

Check fundamental logical and numerical operationsNot Run

Check usage of vector and bus signalsNot Run

Check connections between structural subsystemsNot Run

Check for division by zero in SimulinkNot Run

1.8.2 Model Metrics 0 0 0 0 10**Simulink block metric**Not Run

Subsystem metricNot Run

Library link metricNot Run

Effective lines of MATLAB code metricNot Run

Stateflow chart objects metricNot Run

Lines of code for Stateflow blocks metricNot Run

Nondescriptive block name metricNot Run

Data and structure layer separation metricNot Run

Subsystem depth metricNot Run

Cyclomatic complexity metric

Not Run

1.9 Simulink Code Inspector 

Check code generation settings

Not Run

Check data import and export settings

Not Run

Check diagnostic settings

Not Run

Check hardware implementation settings

Not Run

Check math and data types settings

Not Run

Check solver settings

Not Run

Check for unsupported blocks

Not Run

Check for unconnected objects in the model

Not Run

Check system target file setting

Not Run

Check function specification setting

Not Run

Check for Stateflow machine data

Not Run

Check for Stateflow machine events

Not Run

Check the code generation folder structure for the model

Not Run

Check for unsupported Code Mapping settings

Not Run

Check model arguments for storage classes

Not Run

Check usage of Code in MATLAB Functions

Not Run

Check MATLAB Code Analyzer messages

Not Run

Check storage class for workspace variablesNot Run

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

Check for usage of fixed-point instrumentationNot Run

Check for usage of synthesized local data storesNot Run

Check Loop unrolling threshold settingNot Run

Check usage of global data storesNot Run

Check global data stores' name shadowNot Run

Check destinations of If and Switchcase blocksNot Run

Check for root Outport blocks that have non-auto storage classNot Run

Check for Terminator blocks that connect to Model block outportsNot Run

Check for unsupported propagation of initial condition valuesNot Run

Check data type replacement namesNot Run

Check for multiple sample times in model used as a model reference targetNot Run

Check GetSet storage class for workspace variablesNot Run

Check Treat each discrete rate as a separate task settingNot Run

Check model for commented out blocksNot Run

Check model for void_void subsystems that use the same function nameNot Run

Check n-D Lookup Table blocks for incompatible breakpoint data typeNot Run

Check model for reusable subsystems that use the same function interfaces

Not Run

Check for usage of shared synthesized local data storesNot Run

Check model for compiled and graphical block sorted orderNot Run

Check usage of Sources blocksNot Run

Check usage of Signal Routing blocksNot Run

Check usage of Math Operations blocksNot Run

Check usage of Signal Attributes blocksNot Run

Check usage of Logical and Bit Operations blocksNot Run

Check usage of Lookup Tables blocksNot Run

Check usage of User-Defined Function blocksNot Run

Check usage of Ports and Subsystems blocksNot Run

Check usage of Discontinuities blocksNot Run

Check usage of Sinks blocksNot Run

Check usage of Discrete blocksNot Run

Check usage of Stateflow blocksNot Run

Check usage of String blocksNot Run

Check usage of Stateflow chartsNot Run

Check usage of Stateflow MATLAB action languageNot Run

Check usage of Stateflow transitionsNot Run

Check usage of Stateflow junctions

Not Run

Check usage of Stateflow data

Not Run

Check usage of Stateflow events

Not Run

Check usage of Stateflow states

Not Run

Check usage of Stateflow graphical functions

Not Run

Check usage of Stateflow truth tables

Not Run

Check usage of MATLAB Function Blocks

Not Run

Check usage of Data in MATLAB Functions

Not Run

Check usage of root Outport blocks

Not Run

Check usage of buses

Not Run

Check usage of shared utilities

Not Run

Check for sample times in the model

Not Run

Check conditional input branch execution setting

Not Run

1.10 Requirements Toolbox **1.10.1 Requirements Consistency** **Identify requirement links with missing documents**

Not Run

Identify requirement links that specify invalid locations within documents

Not Run

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

Not Run

Identify requirement links with path type inconsistent with preferences

Not Run

❑ 1.11 Simulink Design Verifier **❑ 1.11.1 Design Error Detection** **❑ Detect Dead Logic**

Not Run

❑ Detect Out Of Bound Array Access

Not Run

❑ Detect Division By Zero

Not Run

❑ Detect Integer Overflow

Not Run

❑ Detect Non-finite and NaN Floating-point Values

Not Run

❑ Detect Subnormal Floating-point Values

Not Run

❑ Detect Specified Minimum and Maximum Value Violations

Not Run

❑ Detect Data Store Access Violations

Not Run

❑ Detect Block Input Range Violations

Not Run

❑ Detect Usage of remainder and reciprocal operations - hisl_0002

Not Run

❑ Detect Usage of square root operations - hisl_0003

Not Run

❑ Detect Usage of log and log10 operations - hisl_0004

Not Run

❑ Detect Usage of Reciprocal Square Root Blocks - hisl_0028

Not Run

❑ Check compatibility with Simulink Design Verifier

Not Run

❑ 1.12 Simulink Control Design **❑ Identify time-varying source blocks interfering with frequency response estimation**

Not Run

❑ 2 By Task 

2.1 Modeling Physical Systems

-0 ✘0 ⚠0 ✎0 ✓1 📄1

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

Not Run

2.2 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.

2.3 Simulink PLC Coder

-0 ✘0 ⚠3 ✎0 ✓18 📄3

2.3.1 Model configuration checks

-0 ✘0 ⚠0 ✎0 ✓7 📄1

Check Data Store Memory blocks

Lists all the Data Store Memory blocks which do not resolve to Simulink signal

Passed**Check model for Stateflow messages**

Checks if model uses any Stateflow messages

Passed**Check if signal lines are configured properly**

Lists all the signal lines that are not compatible with Simulink PLC Coder

Passed**Check if model uses row major algorithms**

Checks if model uses row major algorithms

Passed**Check model mask parameters**

Lists all the mask parameters which have Inf elements

Passed**Check if model uses machine parented data**

Lists all the blocks/events that use machine parented data

Passed**Check if model uses custom code**

Checks if model uses custom code

Passed**Check model tunable parameters**

Not Run

2.3.2 Checks for blocks and block settings

-0 ✘0 ⚠0 ✎0 ✓8 📄1

Check if model uses event based blocks

Lists all the event based blocks that are not compatible with Simulink PLC Coder
Passed

Check if model uses probe blocks

Lists all the probe blocks that are not compatible with Simulink PLC Coder
Passed

Check if model uses environment controller blocks

Lists all the environment controller blocks that are not compatible with Simulink PLC Coder
Passed

Check Stateflow chart update

Lists all the Stateflow charts that are not compatible with Simulink PLC Coder
Passed

Check issues with integrator blocks

Lists all the discrete integrator blocks that have incompatible initial conditions
Passed

Check if model uses unsupported blocks

Lists all the blocks that are not compatible with Simulink PLC Coder
Passed

Check if model can generate testbench

Checks if top level subsystem has inputs and outputs when testbench generation is enabled
Passed

Check function packaging configuration

Checks if subsystems are set to generate reusable functions
Passed

Check trigonometric blocks

Not Run

2.3.3 Industry standard checks 0 0 3 0 3 1

⚠ Define the names to avoid

Names defined as keywords must not be used

Warning

This check is not intended for the root level of the model

Recommended Action

Run this check for the subsystem level

Input Parameters Selection

Name	Value
Open Keywords File	N/A

⚠ Define the use of case (capitals)

The use of capital letters in object names must be clear and consistent across the project

Warning

This check is not intended for the root level of the model

Recommended Action

Run this check for the subsystem level

Input Parameters Selection

Name	Value
allowlowercase	
Ignore prefix	false

⚠ Define the maximum variable name length

Names that exceed the defined maximum name length must be avoided

Warning

This check is not intended for the root level of the model

Recommended Action

Run this check for the subsystem level

Input Parameters Selection

Name	Value
Maximum acceptable length	32

✓ Comments must describe the intention of the code

Check if function blocks have comments

Warning

This check is not intended for the root level of the model

Recommended Action

Run this check for the subsystem level

✓ Avoid nested comments

Nesting of multiline comments must be avoided

Warning

This check is not intended for the root level of the model

Recommended Action

Run this check for the subsystem level

✓ Define maximum number of input/output/in-out variables of a POU

The number of input variables, output variables, and in-out variables of a POU should be within a limited set

Warning

This check is not intended for the root level of the model

Recommended Action

Run this check for the subsystem level

Input Parameters Selection

Name	Value
Maximum number of I/O variables	20

☐ Define type prefixes for variables (if used)

Not Run

☒ 2.4 Simulation Accuracy 0 0 0 0 1

☐ Check for non-continuous signals driving derivative ports

Not Run

☒ 2.5 Simulation Runtime Accuracy Diagnostics 0 0 0 2 0

✓ Runtime diagnostics for S-functions

Passed

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

Passed

❑ 2.6 Managing Data Store Memory Blocks 0 X0 A1 M0 V0 L3

⚠ 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

Not Run

❑ Check for potential ordering issues involving data store access

Not Run

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

Not Run

❑ 2.7 Simulink Model File Integrity 0 X0 A0 M0 V1 L0

✓ 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.

❑ 2.8 S-function Checks 0 X0 A0 M0 V1 L0

✓ Check S-functions in the model

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

❑ 2.9 Units Inconsistencies 0 X0 A0 M0 V0 L5

❑ 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

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

Check for optimal bus virtuality

Passed

Check structure parameter usage with bus signals

Not Run

Check bus signals treated as vectors

Not Run

2.11 Code Generation Efficiency 0 0 1 7 3

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	Use bitsets for storing state configuration (StateBitsets)	off	on
Warning	Use bitsets for storing Boolean data (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

Not Run

Identify questionable fixed-point operations

Not Run

Identify blocks that generate expensive fixed-point and saturation code

Not Run

✓ Identify blocks generating inefficient algorithms**Passed**

No inefficient algorithms found in the model.

☒ 2.12 Modeling Single-Precision Systems       **☒ Identify questionable operations for strict single-precision design**

Not Run

☒ 2.13 Migrating to Simplified Initialization mode      **☒ 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

☒ 2.14 Row-Major Code Generation      **✓ Identify blocks generating inefficient algorithms****Passed**

No inefficient algorithms found in the model.

☒ Check for blocks not supported for row-major code generation

Not Run

☒ Identify TLC S-Functions with unset array layout

Not Run

☒ 2.15 Model Referencing      **✓ 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

Not Run

Check root model Import block specifications

Passed

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

Not Run

2.16 Managing Library Links And Variants 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.

2.17 Data Transfer Efficiency 0 0 0 0 1

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

Not Run

2.18 Modeling Standards for MISRA C:2012 0 0 2 5 6

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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	Prerequisite constraint not met.	off	UtilityFuncGeneration
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	MAT-file logging (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	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

[^ Less](#)**Recommended Action**

Modify the configuration parameters listed above to the recommended values.

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

Block not supported for code generation

Warning

The following blocks are not supported or not recommended for C/C++ production code deployment:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

✓ 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

Not Run

☒ Check for recursive function calls

Not Run

☒ Check for equality and inequality operations on floating-point values

Not Run

☒ Check for missing const qualifiers in model functions

Not Run

☒ Check integer word lengths

Not Run

Check bus object names that are used as bus element names

Not Run

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

0 0 6 0 6 15

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	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	MAT-file logging (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

[^ Less](#)

Recommended Action

Modify the configuration parameters listed above to the recommended values.

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

Block not supported for code generation

Warning

The following blocks are not supported or not recommended for C/C++ production code deployment:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

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

Not Run

Check for equality and inequality operations on floating-point values

Not Run

Check integer word lengths

Not Run

Detect Dead Logic

Not Run

Detect Integer Overflow

Not Run

Detect Division By Zero

Not Run

Detect Out Of Bound Array Access

Not Run

Detect Specified Minimum and Maximum Value Violations

Not Run

2.19.1 High-Integrity Systems 0 0 4 0 3 7

2.19.1.1 Simulink 0 0 1 0 2 6

Check usage of Abs blocks

Not Run

Check usage of remainder and reciprocal operations

Not Run

Check usage of log and log10 operations

Not Run

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

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.

Warning

The following blocks are not recommended for C/C++ production code generation:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

Check data types for blocks with index signals

Not Run

Check usage of Reciprocal Sqrt blocks

Not Run

Check 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 bit-shift operations

Not Run

2.19.1.2 Configuration     **Check safety-related optimization settings for data type conversions**

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

Warning

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

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

Recommended Action

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

Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that apply to division arithmetic exceptions and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	NoFixptDivByZeroProtection	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile

Recommended Action

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

2.19.1.3 Naming     **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

Not Run

2.19.1.4 Code     **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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	<i>Prerequisite constraint not met.</i>	off	UtilityFuncGeneration
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	<i>Prerequisite constraint not</i>	off	SystemTargetFile

		<i>met.</i>		
Warning	SupportNonInlinedSFCns	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	
Warning	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Standards, Maximum	SystemTargetFile
Warning	CastingMode	<i>Prerequisite constraint not met.</i>	Standards	SystemTargetFile
Warning	InternalIdentifier	<i>Prerequisite constraint not met.</i>	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	EnableSignedRightShifts	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

[^ Less](#)**Recommended Action**

Modify the configuration parameters listed above to the recommended values.

2.20 Upgrading to the Current Simulink Version **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 Integrated_Model.

[Open the Upgrade Advisor](#)**2.21 Modeling Standards for DO-178C/DO-331** **Display model version information**

Not Run

2.21.1 High-Integrity Systems **2.21.1.1 Simulink** **Check usage of Abs blocks**

Not Run

Check usage of remainder and reciprocal operations

Not Run

Check usage of square root operations

Not Run

Check usage of log and log10 operations

Not Run

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

Check usage of For and While Iterator subsystems

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

Passed

No sample time-dependent blocks in For or While Iterator subsystems.

Check usage of For Iterator blocks

Not Run

Check usage of If blocks and If Action Subsystem blocks

Not Run

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

Not Run

Check usage of conditionally executed subsystems

Not Run

Check usage of Merge blocks

Not Run

Check relational comparisons on floating-point signals

Not Run

Check usage of Relational Operator blocks

Not Run

Check usage of Logical Operator blocks

Not Run

Check usage of bitwise operations

Not Run

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.

Warning

The following blocks are not recommended for C/C++ production code generation:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

Check for inconsistent vector indexing methods

Identify inconsistent usage of vector indexing methods across the model or subsystem.

Passed

No blocks found using inconsistent indexing modes.

Check data types for blocks with index signals

Not Run

✓ Check usage of variant blocks

Check variant block settings that might result in code that doesn't trace back to requirements.

Passed

No variant blocks have "VariantActivationTime" set to 'code compile'.

✓ 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

No lookup table blocks found to not generate out-of-range checking code.

✗ Check usage of Signal Routing blocks

Not Run

✓ Check for root Imports with missing properties

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

Passed

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

✗ Check for root Imports with missing range definitions

Not Run

✗ Check for root Outports with missing range definitions

Not Run

✗ Check usage of Reciprocal Sqrt blocks

Not Run

✗ Check usage of Assignment blocks

Not Run

✓ Check 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

Not Run

✗ Check data type of loop control variables

Not Run

✗ Check for divide-by-zero calculations

Not Run

✓ Check for parameter tunability ignored for referenced models

Check for models parameter tunability information specified using Model Parameter Configuration dialog boxes.

Passed

No parameters found that lose the tunability defined in the referenced models.

✗ Check usage of bit-shift operations

Not Run

⚠ Check safety-related diagnostic settings for variants

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Variant condition mismatch at signal source and destination (VariantConditionMismatch)	none	error

Recommended Action

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

✓ Check for disabled and parameterized library links

Identify disabled and parameterized library links in the model.

Passed

No blocks found that have disabled or parameterized library links.

☰ Check for unreachable and dead code

Not Run

☒ **2.21.1.2 Stateflow** ⊖ 0 ✗ 0 ⚠ 1 ⤒ 0 ✓ 7 ⤓ 4
✓ Check state machine type of Stateflow charts

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 recursions

Not Run

⚠ Check Stateflow debugging options

Identify whether Stateflow debugging options are set appropriately.

Warning

The following Stateflow debugging options are not set appropriately:

Parameter	Current Value	Recommended Values
Wrap on overflow_(IntegerOverflowMsg)	warning	error
Simulation range checking_(SignalRangeChecking)	none	error

Recommended Action

Change the Stateflow debugging options to the recommended value.

✓ 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

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

Not Run

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

Check scoping of Stateflow data objects

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

Passed

All Stateflow data objects are properly scoped.

Check Stateflow charts for uniquely defined data objects

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

Passed

No Stateflow data identifiers found to be defined in multiple scopes.

Check assignment operations in Stateflow charts

Not Run

Check Stateflow charts for unary operators

Not Run

2.21.1.3 MATLAB 0 0 0 0 0 7 4

Check 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 Function interfaces with inherited complexity or data type properties found.

Check MATLAB Function metrics

Identify MATLAB Functions that violate code and complexity metrics.

Passed

No MATLAB Function blocks found that violate code and complexity metrics.

Check MATLAB Code Analyzer messages

Check MATLAB functions for %#codegen directive, MATLAB Code Analyzer messages, and justification message IDs.

Passed

No MATLAB Function blocks found with Code Analyzer messages, missing %#codegen directive or inappropriate usage of justification message IDs.

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

Not Run

Check usage of logical operators and functions in MATLAB Function blocks

Not Run

Check type and size of condition expressions

Not Run

Check MATLAB functions not supported for code generation

Identify MATLAB functions that are not supported for code generation.

Passed

All identified MATLAB functions are supported for code generation.

Metrics for generated code complexity

Not Run

2.21.1.4 Configuration

0 0 24 0 8 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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect read before write (ReadBeforeWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after read (WriteAfterReadMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after write (WriteAfterWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Duplicate data store names (UniqueDataStoreMsg)	none	error

Recommended Action

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

Check safety-related diagnostic settings for saving

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	warning	error
Warning	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	warning	error

Recommended Action

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

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.

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	Show eliminated blocks (ShowEliminatedStatement)	off	on	GenerateComments
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	Verbose comments for 'Model default' storage class (ForceParamTrailComments)	off	on	GenerateComments
Warning	ReqInCode	Prerequisite constraint not met.	on	SystemTargetFile, GenerateComments

Recommended Action

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

⚠ Check safety-related code generation interface settings

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

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	Support non-finite numbers (SupportNonFinite)	on	off	
Warning	SupportAbsoluteTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	IncludeMdlTerminateFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SuppressErrorStatus	Prerequisite constraint not met.	on	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	

Recommended Action

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

✓ Check safety-related solver settings for simulation time

Identify if the model Start time is set to 0 and Stop time is less than the Application Life Span.

Passed

No issues found with solver settings for simulation time.

⚠ Check safety-related solver settings for solver options

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

Warning

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

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

Recommended Action

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

✓ 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.

⚠ Check safety-related diagnostic settings for solvers

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Algebraic loop (AlgebraicLoopMsg)	warning	error
Warning	Minimize algebraic loop (ArtificialAlgebraicLoopMsg)	warning	error
Warning	Block priority violation (BlockPriorityViolationMsg)	warning	error
Warning	Automatic solver parameter selection (SolverPrmCheckMsg)	none	error
Warning	State name clash (StateNameClashWarn)	none	warning

Recommended Action

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

⚠ Check safety-related diagnostic settings for sample time

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Source block specifies -1 sample time (InheritedTslnSrcMsg)	warning	error
Warning	Enforce sample times specified by Signal Specification blocks (SigSpecEnsureSampleTimeMsg)	warning	error
Warning	Single task data transfer (SingleTaskRateTransMsg)	none	error
Warning	Tasks with equal priority (TasksWithSamePriorityMsg)	warning	error
Warning	Unspecified inheritability of sample time (UnknownTslnhSupMsg)	warning	error

Recommended Action

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

✓ 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

⚠ Check safety-related block reduction optimization settings

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

Warning

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

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

Recommended Action

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

⚠ 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.

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	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Maximum, Standards	SystemTargetFile
Warning	PreserveExpressionOrder	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

⚠ Check safety-related optimization settings for application lifespan

Check optimization settings in the model configuration that apply to application lifespan and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Application lifespan (days) (LifeSpan)	auto	inf

Recommended Action

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

⚠ Check safety-related code generation identifier settings

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Not Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target		
Warning	MangleLength	<i>Prerequisite constraint not met.</i>		1, 2, 3	SystemTargetFile

Recommended Action

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

⚠ Check safety-related optimization settings for data initialization

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	ZeroExternalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging
Warning	ZeroInternalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging

Recommended Action

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

* 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 apply to data type conversions and might impact safety.

Warning

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

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

Recommended Action

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

⚠ Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that apply to division arithmetic exceptions and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Warning NoFixptDivByZeroProtection

Prerequisite constraint not met. off

SystemTargetFile

Recommended Action

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

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

Check optimization settings in the model configuration that apply to specified minimum and maximum values and might impact safety.

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	UseSpecifiedMinMax	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

✓ Check safety-related settings for 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.

⚠ Check safety-related diagnostic settings for compatibility

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	S-function upgrades needed (SFcnCompatibilityMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for parameters

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect underflow (ParameterUnderflowMsg)	none	error
Warning	Detect precision loss (ParameterPrecisionLossMsg)	warning	error
Warning	Detect loss of tunability (ParameterTunabilityLossMsg)	warning	error

Recommended Action

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

✓ 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 diagnostic settings in the model configuration that affect model initialization and might impact safety.

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.

Warning

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

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

Recommended Action

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

Check safety-related diagnostic settings for signal connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Signal label mismatch (SignalLabelMismatchMsg)	none	error
Warning	Unconnected block input ports (UnconnectedInputMsg)	none	error
Warning	Unconnected block output ports (UnconnectedOutputMsg)	none	error
Warning	Unconnected line (UnconnectedLineMsg)	none	error

Recommended Action

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

Check safety-related diagnostic settings for bus connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	warning	error
Warning	Element name mismatch (BusObjectLabelMismatch)	warning	error
Warning	Bus signal treated as vector (StrictBusMsg)	ErrorLevel1	ErrorOnBusTreatedAsVector
Warning	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	none	error

Recommended Action

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

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	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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	none	warning
Warning	Vector/matrix block input conversion (VectorMatrixConversionMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for model referencing

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Port and parameter mismatch (ModelReferenceOMismatchMessage)	none	error
Warning	Invalid root Inport/Outport block connection (ModelReferenceOMsg)	none	error
Warning	Unsupported data logging (ModelReferenceDataLoggingMessage)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for Stateflow

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Invalid input data access in chart initialization (SFInvalidInputDataAccessInChartInitDiag)	warning	error
Warning	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	warning	error
Warning	Unreachable execution path (SFUnreachableExecutionPathDiag)	warning	error
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error
Warning	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	warning	error
Warning	Absolute time temporal value shorter than sampling period (SFTemporalDelaySmallerThanSampleTimeDiag)	warning	error
Warning	Self-transition on leaf state (SFSelfTransitionDiag)	warning	error
Warning	'Execute-at-initialization' disabled in presence of input events (SFEExecutionAtInitializationDiag)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal data

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Underspecified data types (UnderSpecifiedDataTypeMsg)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

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

☒ **2.21.1.5 Naming** ⚡0 ✘0 ⚠0 ✎0 ✓1 ⌂1

✓ 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

Not Run

2.21.1.6 Requirements 0 0 1 0 0

Check for model elements that do not link to requirements

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

Warning

The following model elements do not link to a requirements document:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Subsystem](#)

[^ Less](#)

Recommended Action

For each model element in the list, in the Model Editor, right-click the model element, select Requirements, and specify a requirement. Check the [Traceability Matrix](#) for viewing requirements and their links to blocks in Simulink model in a compact format.

2.21.1.7 Code 0 0 1 0 1 0

Check for blocks not recommended for MISRA C:2012

Passed

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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	Prerequisite constraint not met.	off	UtilityFuncGeneration
D - Warning	System target file (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	MAT-file logging (MatFileLogging)	on	off	
Warning	ParenthesesLevel	Prerequisite constraint not met.	Standards, Maximum	SystemTargetFile
Warning	CastingMode	Prerequisite constraint not	Standards	SystemTargetFile

Warning	InternalIdentifier	<i>met.</i> <i>Prerequisite constraint not met.</i>	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	EnableSignedRightShifts	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

[^ Less](#)**Recommended Action**

Modify the configuration parameters listed above to the recommended values.

2.21.2 Simulink 0 0 1 0 0**⚠ Identify unconnected lines, input ports, and output ports**

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

Warning

The following lines, input ports, or output ports are not properly connected in system: Integrated_Model

- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)

[^ Less](#)**Recommended Action**

Connect the blocks specified in the list

2.21.3 Library Links 0 0 0 1 0**✓ Identify unresolved library links**

Passed

2.21.4 Requirements Consistency 0 0 0 4 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

✗ 2.22 Modeling Standards for DO-254 0 0 19 0 44 29

✗ Display model version information

Not Run

✗ 2.22.1 High-Integrity Systems 0 0 12 0 20 18

✗ 2.22.1.1 Simulink 0 0 1 0 6 13

✗ Check usage of Abs blocks

Not Run

✗ Check usage of conditionally executed subsystems

Not Run

✗ Check relational comparisons on floating-point signals

Not Run

✗ Check usage of Relational Operator blocks

Not Run

✗ Check usage of Logical Operator blocks

Not Run

✗ Check usage of bitwise operations

Not Run

✓ Check for inconsistent vector indexing methods

Identify inconsistent usage of vector indexing methods across the model or subsystem.

Passed

No blocks found using inconsistent indexing modes.

✗ Check data types for blocks with index signals

Not Run

✓ Check for root Imports with missing properties

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

Passed

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

✗ Check for root Imports with missing range definitions

Not Run

✗ Check for root Outports with missing range definitions

Not Run

Check usage of Assignment blocks

Not Run

Check 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

Not Run

Check data type of loop control variables

Not Run

Check for parameter tunability ignored for referenced models

Check for models parameter tunability information specified using Model Parameter Configuration dialog boxes.

Passed

No parameters found that lose the tunability defined in the referenced models.

Check usage of bit-shift operations

Not Run

Check safety-related diagnostic settings for variants

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Variant condition mismatch at signal source and destination (VariantConditionMismatch)	none	error

Recommended Action

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

Check for disabled and parameterized library links

Identify disabled and parameterized library links in the model.

Passed

No blocks found that have disabled or parameterized library links.

2.22.1.2 Stateflow 0 0 1 0 6 2

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 recursions

Not Run

Check Stateflow debugging options

Identify whether Stateflow debugging options are set appropriately.

Warning

The following Stateflow debugging options are not set appropriately:

Parameter	Current Value	Recommended Values
Wrap on overflow (IntegerOverflowMsg)	warning	error
Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

Change the Stateflow debugging options to the recommended value.

✓ 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

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 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

✓ Check scoping of Stateflow data objects

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

Passed

All Stateflow data objects are properly scoped.

✓ Check Stateflow charts for uniquely defined data objects

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

Passed

No Stateflow data identifiers found to be defined in multiple scopes.

✗ Check Stateflow charts for unary operators

Not Run

✗ 2.22.1.3 MATLAB 0 0 0 0 5 2

✓ Check 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 MATLAB Code Analyzer messages

Check MATLAB functions for %#codegen directive, MATLAB Code Analyzer messages, and justification message IDs.

Passed

No MATLAB Function blocks found with Code Analyzer messages, missing %#codegen directive or inappropriate usage of justification message IDs.

✓ 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

Not Run

Check usage of logical operators and functions in MATLAB Function blocks

Not Run

Check MATLAB functions not supported for code generation

Identify MATLAB functions that are not supported for code generation.

Passed

All identified MATLAB functions are supported for code generation.

2.22.1.4 Configuration

0 0 0 9 2 0

Check safety-related diagnostic settings for saving

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	warning	error
Warning	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	warning	error

Recommended Action

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

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 block reduction optimization settings

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

Warning

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

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

Recommended Action

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

Check safety-related diagnostic settings for parameters

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect underflow (ParameterUnderflowMsg)	none	error
Warning	Detect precision loss (ParameterPrecisionLossMsg)	warning	error
Warning	Detect loss of tunability (ParameterTunabilityLossMsg)	warning	error

Recommended Action

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

✓ Check safety-related diagnostic settings for model initialization

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

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 signal connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Signal label mismatch (SignalLabelMismatchMsg)	none	error
Warning	Unconnected block input ports (UnconnectedInputMsg)	none	error
Warning	Unconnected block output ports (UnconnectedOutputMsg)	none	error
Warning	Unconnected line (UnconnectedLineMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for bus connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	warning	error
Warning	Element name mismatch (BusObjectLabelMismatch)	warning	error
Warning	Bus signal treated as vector (StrictBusMsg)	ErrorLevel1	ErrorOnBusTreatedAsVector
Warning	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for type conversions

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	none	warning
Warning	Vector/matrix block input conversion (VectorMatrixConversionMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for model referencing

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Port and parameter mismatch (ModelReferenceOMismatchMessage)	none	error
Warning	Invalid root Inport/Outport block connection (ModelReferenceOMsg)	none	error
Warning	Unsupported data logging (ModelReferenceDataLoggingMessage)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for Stateflow

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Invalid input data access in chart initialization (\$FInvalidInputDataAccessInChartInitDiag)	warning	error
Warning	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	warning	error
Warning	Unreachable execution path (SFUnreachableExecutionPathDiag)	warning	error
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error
Warning	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	warning	error
Warning	Absolute time temporal value shorter than sampling period (SFTemporalDelaySmallerThanSampleTimeDiag)	warning	error
Warning	Self-transition on leaf state (SFSelfTransitionDiag)	warning	error
Warning	'Execute-at-initialization' disabled in presence of input events (SFEExecutionAtInitializationDiag)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal data

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Underspecified data types (UnderSpecifiedDataTypeMsg)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

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

2.22.1.5 Naming -0 X0 A0 M0 ✓1 D1

✓ 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 -0 X0 A1 M0 ✓0 D0

⚠ Check for model elements that do not link to requirements

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

Warning

The following model elements do not link to a requirements document:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Subsystem](#)

[^ Less](#)**Recommended Action**

For each model element in the list, in the Model Editor, right-click the model element, select Requirements, and specify a requirement. Check the [Traceability Matrix](#) for viewing requirements and their links to blocks in Simulink model in a compact format.

2.22.2 Library Links 0 0 0 1 0

✓ Identify unresolved library links

Passed

2.22.3 Requirements Consistency 0 0 0 4 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

2.22.4 HDL Coder 0 0 7 19 10

2.22.4.1 Checks for blocks and block settings 0 0 2 6 1

✓ Check for HDL Reciprocal block usage**Passed** : Check for HDL Reciprocal block usage**⚠ Check for infinite and continuous sample time sources****Warn** : Check for infinite and continuous sample time sources**Warning** : Infinite sample time specified in

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Constant](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant](#)

- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant24](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant9](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Constants5](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical low thyroid](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical overactive thyroid](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant5](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant6](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant7](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant8](#)

[^ Less](#)

⚠ Check for unsupported blocks

Warn : Check for unsupported blocks

Warning : unsupported-blocks:built-in/LampBlock

- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Lamp](#)

✓ Check for MATLAB Function block settings

Passed : Check for MATLAB Function block settings

✓ Check for Stateflow chart settings

Passed : Check for Stateflow chart settings

✓ Check for Trigonometric Function block for LUT-based approximation method

Passed : Check for Trigonometric Function block for LUT-based approximation method

✓ Check for obsolete Unit Delay Enabled/Resettable blocks

Passed : Check for obsolete Unit Delay Enabled/Resettable blocks

✓ Check for unsupported storage class for signal objects

Passed : Check for unsupported storage class for signal objects

📄 Check for large matrix operations

Not Run

☒ 2.22.4.2 Industry standard checks

🔴0 ✖0 ⚠3 ✅0 ✅8 📈0

✓ Check file extension

Passed : Check file extension

✓ Check naming conventions

Passed : Check naming conventions

✓ Check top-level subsystem/port names

Passed : Check top-level subsystem/port names

✓ Check module/entity names

Passed : Check module/entity names

⚠ Check package file names

Warn : Check package file names

Warning : The postfix for the package file is '_pkg'. Industry standards recommend '_pac' as the postfix name.

- [Integrated_Model](#)

⚠ Check signal and port names**Warn : Check signal and port names**

Warning : Following ports and/or signals from the blocks have names that are less than 2 characters or greater than 40 characters.

- [Integrated_Model/Subsystem2/u](#)
 - [Integrated_Model/Subsystem2/Subsystem1/u](#)
 - [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/u](#)
 - [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/u](#)
-

✓ Check generics**Passed : Check generics****⚠ Check clock, reset, and enable signals****Warn : Check clock, reset, and enable signals**

Warning : Recommended naming conventions are not followed by the reset signal 'reset'.

- [Integrated_Model](#)
-

✓ Check architecture name**Passed : Check architecture name****✓ Check entity and architecture****Passed : Check entity and architecture****✓ Check clock settings****Passed : Check clock settings****☒ 2.22.4.3 Model configuration checks**
⚠ Check for model parameters suited for the HDL code generation**Warn : Check for model parameters suited for the HDL code generation**

Warning : Following recommended model settings are not compliant

- The parameter SingleTaskRateTransMsg is set to none, but it should be set to error.
- The parameter Solver is set to VariableStepAuto, but it should be set to FixedStepDiscrete.
- The parameter AlgebraicLoopMsg is set to warning, but it should be set to error.
- The parameter ShowLineDimensions is set to off, but it should be set to on.
- The parameter ShowPortDataTypes is set to off, but it should be set to on.
- The parameter BlockReduction is set to on, but it should be set to off.
- The parameter ConditionallyExecuteInputs is set to on, but it should be set to off.
- The parameter DefaultParameterBehavior is set to Tunable, but it should be set to Inlined.
- The parameter ProdHWDeviceType is set to Intel->x86-64 (Windows64), but it should be set to ASIC/FPGA->ASIC/FPGA.
- The parameter DataTypeOverride is set to UseLocalSettings, but it should be set to Off.
- The parameter InheritOutputTypeSmallerThanSingle is set to off, but it should be set to on.

[^ Less](#)

✓ Check for global reset setting for Xilinx and Altera devices**Passed : Check for global reset setting for Xilinx and Altera devices****✓ Check inline configurations setting****Passed : Check inline configurations setting****⚠ Check for visualization settings****Warn : Check for visualization settings**

Message : Following recommended model settings are not compliant

- Data type display on signals and ports is disabled.
 - Sample time display is disabled. There will not be any color codes representing sample times.
-

✓ Check delay balancing setting**Passed : Check delay balancing setting****☒ Check algebraic loops**

Not Run

2.22.4.4 Native Floating Point checks 0 0 0 0 8

Check for blocks that have nonzero output latency

Not Run

Check blocks with nonzero ulp error

Not Run

Check for single datatypes in the model

Not Run

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 unsupported blocks with Native Floating Point

Not Run

2.22.4.5 Checks for ports and subsystems 0 0 0 2 0

Check for invalid top level subsystem

Passed : Check for invalid top level subsystem

Check initial conditions of enabled and triggered subsystems

Passed : Check initial conditions of enabled and triggered subsystems

2.23 Modeling Standards for IEC 61508 0 0 30 35 34

Display configuration management data

Not Run

Display model metrics and complexity report

Display number of elements and name, level, and depth of subsystems for the model or subsystem

Model metrics information

Display number of elements for Simulink blocks and Stateflow constructs

Summary

Element Type	Count
Import	49
Output	54
SubSystem	104

Simulink

Block Type	Count

Constant	113
SubSystem	104
Switch	67
Outport	54
Inport	49
Display	24
Product	13
Logic	11
StringConstant	7
From	3
Goto	3
LampBlock	1
Scope	1
Demux	1
FromWorkspace	1

[^ Less](#)**Model complexity information**

Display name, level, and depth of subsystems

Maximum Subsystem Depth: 6

Subsystem Depth

Subsystem Name	Level	Depth
Integrated_Model/Subsystem2	1	5
Integrated_Model/Subsystem2/Subsystem1	2	4
.../Subsystem1/Blood_Classification	3	2
.../Blood_Classification/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Compare To Constant3	4	1
.../Compare To Constant4	4	1
.../Compare To Constant5	4	1
.../Compare To Constant6	4	1
.../Compare To Constant7	4	1
.../Subsystem1/Blood_Platelet_Count	3	2
.../Blood_Platelet_Count/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Subsystem1/Body_Temperature_Check	3	2
.../Celsius_to_Fahrenheit	4	1
.../Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Subsystem1/Condition Of Kidney	3	2
.../Condition Of Kidney/Compare To Constant	4	1
.../Condition Of Kidney/Compare To Constant1	4	1
.../Condition Of Kidney/Compare To Constant2	4	1
.../Condition Of Kidney/Compare To Constant3	4	1
.../Condition Of Kidney/Compare To Constant4	4	1
.../Subsystem2/Subsystem1/Glucometer	3	3
.../Subsystem1/Glucometer/Subsystem	4	2
.../Glucometer/Subsystem/Compare To Constant	5	1
.../Subsystem/Compare To Constant1	5	1
.../Subsystem/Compare To Constant2	5	1
.../Subsystem/Compare To Constant3	5	1
.../Subsystem2/Subsystem1/Oximeter	3	2
.../Subsystem1/Oximeter/Compare To Constant	4	1
.../Subsystem1/Oximeter/Compare To Constant1	4	1
.../Subsystem1/Oximeter/Compare To Constant2	4	1
.../Subsystem1/Oximeter/Compare To Constant3	4	1
.../Subsystem1/Oximeter/Compare To Constant4	4	1
.../Subsystem1/Oximeter/Compare To Constant5	4	1
.../Subsystem1/Oximeter/Compare To Constant6	4	1
.../Subsystem1/Oximeter/Compare To Constant7	4	1
.../Subsystem1/Oximeter/Compare To Constant8	4	1
.../Subsystem1/Oximeter/Signal Builder	4	1
.../Subsystem2/Subsystem1/Platelet_Count	3	3
.../Subsystem1/Platelet_Count/Subsystem1	4	2
.../Subsystem1/Compare To Constant6	5	1
.../Subsystem1/Compare To Constant7	5	1
.../Subsystem1/Compare To Constant8	5	1
.../Subsystem1/Platelet_Count/Subsystem2	4	2
.../Subsystem2/Compare To Constant3	5	1
.../Subsystem2/Compare To Constant4	5	1
.../Subsystem2/Compare To Constant5	5	1
.../Subsystem1/Platelet_Count/Subsystem3	4	2

.../Subsystem3/Compare To Constant1	5	1
.../Subsystem3/Compare To Constant2	5	1
.../Subsystem3/Compare To Constant9	5	1
.../Subsystem2/Subsystem1/Subsystem	3	3
.../Subsystem1/Subsystem/Diastol_Elevated1	4	2
.../Subsystem/Diastol_Elevated1/121+Compare	5	1
.../Subsystem/Diastol_Elevated1/129-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht3	4	2
.../Subsystem/Diastol_Ht3/130+Compare	5	1
.../Subsystem/Diastol_Ht3/139-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht4	4	2
.../Subsystem/Diastol_Ht4/140+Compare	5	1
.../Subsystem/Diastol_Ht4/159-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Htcrisis1	4	2
.../Subsystem/Diastol_Htcrisis1/180+Compare	5	1
.../Subsystem/Diastol_Htcrisis1/260-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Low1	4	2
.../Subsystem/Diastol_Low1/100-Compare	5	1
.../Subsystem/Diastol_Low1/90+compare	5	1
.../Subsystem1/Subsystem/Diastol_Normal1	4	2
.../Subsystem/Diastol_Normal1/120Compare	5	1
.../Subsystem1/Subsystem/Systol_Elevated	4	2
.../Subsystem/Systol_Elevated/121+Compare	5	1
.../Subsystem/Systol_Elevated/129-Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht1	4	2
.../Subsystem/Systol_Ht1/130+Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht2	4	2
.../Subsystem/Systol_Ht2/140+Compare	5	1
.../Subsystem/Systol_Ht2/159-Compare	5	1
.../Subsystem1/Subsystem/Systol_Htcrisis	4	2
.../Subsystem/Systol_Htcrisis/180+Compare	5	1
.../Subsystem/Systol_Htcrisis/260-Compare	5	1
.../Subsystem1/Subsystem/Systol_Low	4	2
.../Subsystem/Systol_Low/100-Compare	5	1
.../Subsystem/Systol_Low/90+compare	5	1
.../Subsystem1/Subsystem/Systol_Normal	4	2
.../Subsystem/Systol_Normal/120Compare	5	1
.../Subsystem2/Subsystem1/Thyroid_Check	3	2
.../Thyroid_Check/Compare To Normal	4	1
.../Compare To low thyroid symptomatic	4	1
.../Compare To low thyroid symptomatic	4	1
.../Compare To subclinical low thyroid	4	1
.../Compare To subclinical overactive thyroid	4	1
.../Subsystem2/Subsystem1/Urine_Analysis	3	2
.../Urine_Analysis/Compare To Constant	4	1
.../Urine_Analysis/Compare To Constant1	4	1
.../Urine_Analysis/Compare To Constant2	4	1
.../Urine_Analysis/Compare To Constant3	4	1
.../Urine_Analysis/Compare To Constant4	4	1
.../Urine_Analysis/Compare To Constant5	4	1
.../Urine_Analysis/Compare To Constant6	4	1

[^ Less](#)

⚠ Check for unconnected objects

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

Warning

The following lines, input ports, or output ports are not properly connected in system: Integrated_Model

- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

^ Less
Recommended Action

Connect the blocks specified in the list

☒ **2.23.1 High-Integrity Systems** ⚡0 ✘0 ⚡29 ✕0 ✓34 ⌂33

☒ **2.23.1.1 Simulink** ⚡0 ✘0 ⚡2 ✕0 ✓10 ⌂24

☒ **Check usage of Abs blocks**

Not Run

☒ **Check usage of remainder and reciprocal operations**

Not Run

☒ **Check usage of square root operations**

Not Run

☒ **Check usage of log and log10 operations**

Not Run

✓ **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

✓ **Check usage of For and While Iterator subsystems**

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

Passed

No sample time-dependent blocks in For or While Iterator subsystems.

☒ **Check usage of For Iterator blocks**

Not Run

☒ **Check usage of If blocks and If Action Subsystem blocks**

Not Run

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

Not Run

☒ **Check usage of conditionally executed subsystems**

Not Run

☒ **Check usage of Merge blocks**

Not Run

☒ **Check relational comparisons on floating-point signals**

Not Run

☒ **Check usage of Relational Operator blocks**

Not Run

☒ **Check usage of Logical Operator blocks**

Not Run

☒ **Check usage of bitwise operations**

Not Run

⚠ 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.

Warning

The following blocks are not recommended for C/C++ production code generation:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

✓ Check for inconsistent vector indexing methods

Identify inconsistent usage of vector indexing methods across the model or subsystem.

Passed

No blocks found using inconsistent indexing modes.

█ Check data types for blocks with index signals

Not Run

✓ Check usage of variant blocks

Check variant block settings that might result in code that doesn't trace back to requirements.

Passed

No variant blocks have "VariantActivationTime" set to 'code compile'.

✓ 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

No lookup table blocks found to not generate out-of-range checking code.

█ Check usage of Signal Routing blocks

Not Run

✓ Check for root Imports with missing properties

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

Passed

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

█ Check for root Imports with missing range definitions

Not Run

█ Check for root Outports with missing range definitions

Not Run

█ Check usage of Reciprocal Sqrt blocks

Not Run

█ Check usage of Assignment blocks

Not Run

✓ Check 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

Not Run

Check data type of loop control variables

Not Run

Check for divide-by-zero calculations

Not Run

Check for parameter tunability ignored for referenced models

Check for models parameter tunability information specified using Model Parameter Configuration dialog boxes.

Passed

No parameters found that lose the tunability defined in the referenced models.

Check usage of bit-shift operations

Not Run

Check safety-related diagnostic settings for variants

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Variant condition mismatch at signal source and destination (VariantConditionMismatch)	none	error

Recommended Action

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

Check for disabled and parameterized library links

Identify disabled and parameterized library links in the model.

Passed

No blocks found that have disabled or parameterized library links.

Check for unreachable and dead code

Not Run

2.23.1.2 Stateflow 0 0 1 0 7 4

Check state machine type of Stateflow charts

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 recursions

Not Run

Check Stateflow debugging options

Identify whether Stateflow debugging options are set appropriately.

Warning

The following Stateflow debugging options are not set appropriately:

✓ Check MATLAB Code Analyzer messages

Check MATLAB functions for %#codegen directive, MATLAB Code Analyzer messages, and justification message IDs.

Passed

No MATLAB Function blocks found with Code Analyzer messages, missing %#codegen directive or inappropriate usage of justification message IDs.

✓ 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

Not Run

✗ Check usage of logical operators and functions in MATLAB Function blocks

Not Run

✗ Check type and size of condition expressions

Not Run

✓ Check MATLAB functions not supported for code generation

Identify MATLAB functions that are not supported for code generation.

Passed

All identified MATLAB functions are supported for code generation.

✗ Metrics for generated code complexity

Not Run

✗ 2.23.1.4 Configuration 0 0 24 0 8 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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect read before write (ReadBeforeWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after read (WriteAfterReadMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after write (WriteAfterWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Duplicate data store names (UniqueDataStoreMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for saving

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	warning	error
Warning	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	warning	error

Recommended Action

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

✓ 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.

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	Show eliminated blocks (ShowEliminatedStatement)	off	on	GenerateComments
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	Verbose comments for 'Model default' storage class (ForceParamTrailComments)	off	on	GenerateComments
Warning	ReqIsInCode	Prerequisite constraint not met.	on	SystemTargetFile, GenerateComments

Recommended Action

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

⚠ Check safety-related code generation interface settings

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

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	Support non-finite numbers (SupportNonFinite)	on	off	
Warning	SupportAbsoluteTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	IncludeMdITerminateFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SuppressErrorStatus	Prerequisite constraint not met.	on	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	

Recommended Action

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

✓ Check safety-related solver settings for simulation time

Identify if the model Start time is set to 0 and Stop time is less than the Application Life Span.

Passed

No issues found with solver settings for simulation time.

⚠ Check safety-related solver settings for solver options

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

Warning

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

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

Recommended Action

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

✓ 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.

⚠ Check safety-related diagnostic settings for solvers

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Algebraic loop (AlgebraicLoopMsg)	warning	error
Warning	Minimize algebraic loop (ArtificialAlgebraicLoopMsg)	warning	error
Warning	Block priority violation (BlockPriorityViolationMsg)	warning	error
Warning	Automatic solver parameter selection (SolverPrmCheckMsg)	none	error
Warning	State name clash (StateNameClashWarn)	none	warning

Recommended Action

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

⚠ Check safety-related diagnostic settings for sample time

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Source block specifies -1 sample time (InheritedTslnSrcMsg)	warning	error
Warning	Enforce sample times specified by Signal Specification blocks (SigSpecEnsureSampleTimeMsg)	warning	error
Warning	Single task data transfer (SingleTaskRateTransMsg)	none	error
Warning	Tasks with equal priority (TasksWithSamePriorityMsg)	warning	error
Warning	Unspecified inheritability of sample time (UnknownTslnhSupMsg)	warning	error

Recommended Action

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

✓ 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

⚠ Check safety-related block reduction optimization settings

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

Warning

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

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

Recommended Action

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

⚠ 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.

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	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Maximum, Standards	SystemTargetFile
Warning	PreserveExpressionOrder	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

⚠ Check safety-related optimization settings for application lifespan

Check optimization settings in the model configuration that apply to application lifespan and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Application lifespan (days) (LifeSpan)	auto	inf

Recommended Action

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

⚠ Check safety-related code generation identifier settings

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Not Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target		
Warning	MangleLength	<i>Prerequisite constraint not met.</i>		1, 2, 3	SystemTargetFile

Recommended Action

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

⚠ Check safety-related optimization settings for data initialization

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	ZeroExternalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging
Warning	ZerointernalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging

Recommended Action

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

* 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 apply to data type conversions and might impact safety.

Warning

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

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

Recommended Action

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

⚠ Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that apply to division arithmetic exceptions and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	NoFixptDivByZeroProtection	Prerequisite constraint not met.	off	SystemTargetFile

Recommended Action

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

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

Check optimization settings in the model configuration that apply to specified minimum and maximum values and might impact safety.

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	UseSpecifiedMinMax	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

✓ Check safety-related settings for 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.

⚠ Check safety-related diagnostic settings for compatibility

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	S-function upgrades needed (SFcnCompatibilityMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for parameters

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect underflow (ParameterUnderflowMsg)	none	error
Warning	Detect precision loss (ParameterPrecisionLossMsg)	warning	error
Warning	Detect loss of tunability (ParameterTunabilityLossMsg)	warning	error

Recommended Action

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

✓ 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 diagnostic settings in the model configuration that affect model initialization and might impact safety.

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.

Warning

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

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

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Signal label mismatch (SignalLabelMismatchMsg)	none	error
Warning	Unconnected block input ports (UnconnectedInputMsg)	none	error
Warning	Unconnected block output ports (UnconnectedOutputMsg)	none	error
Warning	Unconnected line (UnconnectedLineMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for bus connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	warning	error
Warning	Element name mismatch (BusObjectLabelMismatch)	warning	error
Warning	Bus signal treated as vector (StrictBusMsg)	ErrorLevel1	ErrorOnBusTreatedAsVector
Warning	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	none	error

Recommended Action

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

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	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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	none	warning
Warning	Vector/matrix block input conversion (VectorMatrixConversionMsg)	none	error

Recommended Action

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

Check safety-related diagnostic settings for model referencing

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Port and parameter mismatch (ModelReferenceOMismatchMessage)	none	error
Warning	Invalid root Inport/Outport block connection (ModelReferenceOMsg)	none	error
Warning	Unsupported data logging (ModelReferenceDataLoggingMessage)	warning	error

Recommended Action

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

Check safety-related diagnostic settings for Stateflow

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Invalid input data access in chart initialization (SFInvalidInputDataAccessInChartInitDiag)	warning	error
Warning	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	warning	error
Warning	Unreachable execution path (SFUnreachableExecutionPathDiag)	warning	error
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error
Warning	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	warning	error
Warning	Absolute time temporal value shorter than sampling period (SFTemporalDelaySmallerThanSampleTimeDiag)	warning	error
Warning	Self-transition on leaf state (SFSelfTransitionDiag)	warning	error
Warning	'Execute-at-initialization' disabled in presence of input events (SFFexecutionAtInitializationDiag)	warning	error

Recommended Action

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

Check safety-related diagnostic settings for signal data

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Underspecified data types (UnderSpecifiedDataTypeMsg)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

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

☒ 2.23.1.5 Naming ⚡0 ✘0 ⚠0 ✕0 ✓1 ⌂1

✓ 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

Not Run

☒ 2.23.1.6 Requirements ⚡0 ✘0 ⚠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.

Warning

The following model elements do not link to a requirements document:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Subsystem](#)

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Recommended Action

For each model element in the list, in the Model Editor, right-click the model element, select Requirements, and specify a requirement. Check the [Traceability Matrix](#) for viewing requirements and their links to blocks in Simulink model in a compact format.

☒ 2.23.1.7 Code ⚡0 ✘0 ⚠1 ✕0 ✓1 ⌂0

✓ Check for blocks not recommended for MISRA C:2012

Passed

⚠ 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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	<i>Prerequisite constraint not met.</i>	off	UtilityFuncGeneration
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	SupportNonInlinedSFcns	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	
Warning	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Standards, Maximum	SystemTargetFile
Warning	CastingMode	<i>Prerequisite constraint not met.</i>	Standards	SystemTargetFile
Warning	InternalIdentifier	<i>Prerequisite constraint not met.</i>	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	EnableSignedRightShifts	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

[^ Less](#)

Recommended Action

Modify the configuration parameters listed above to the recommended values.

2.24 Modeling Standards for IEC 62304

0 0 0 30 0 35 34

Display configuration management data

Not Run

Display model metrics and complexity report

Display number of elements and name, level, and depth of subsystems for the model or subsystem

Model metrics information

Display number of elements for Simulink blocks and Stateflow constructs

Summary

Element Type	Count
Import	49
Output	54
SubSystem	104

Simulink

Block Type	Count
Constant	113
SubSystem	104
Switch	67
Outport	54
Import	49
Display	24
Product	13
Logic	11
StringConstant	7
From	3
Goto	3
LampBlock	1
Scope	1
Demux	1
FromWorkspace	1

[^ Less](#)**Model complexity information**

Display name, level, and depth of subsystems

Maximum Subsystem Depth: 6

Subsystem Depth

Subsystem Name	Level	Depth
Integrated_Model/Subsystem2	1	5
Integrated_Model/Subsystem2/Subsystem1	2	4
.../Subsystem1/Blood_Classification	3	2
.../Blood_Classification/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Compare To Constant3	4	1
.../Compare To Constant4	4	1
.../Compare To Constant5	4	1
.../Compare To Constant6	4	1
.../Compare To Constant7	4	1
.../Subsystem1/Blood_Platelet_Count	3	2
.../Blood_Platelet_Count/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Subsystem1/Body_Temperature_Check	3	2
.../Celsius to Fahrenheit	4	1
.../Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Subsystem1/Condition Of Kidney	3	2
.../Condition Of Kidney/Compare To Constant	4	1
.../Condition Of Kidney/Compare To Constant1	4	1
.../Condition Of Kidney/Compare To Constant2	4	1
.../Condition Of Kidney/Compare To Constant3	4	1
.../Condition Of Kidney/Compare To Constant4	4	1
.../Subsystem2/Subsystem1/Glucometer	3	3
.../Subsystem1/Glucometer/Subsystem	4	2
.../Glucometer/Subsystem/Compare To Constant	5	1
.../Subsystem/Compare To Constant1	5	1
.../Subsystem/Compare To Constant2	5	1
.../Subsystem/Compare To Constant3	5	1
.../Subsystem2/Subsystem1/Oximeter	3	2
.../Subsystem1/Oximeter/Compare To Constant	4	1
.../Subsystem1/Oximeter/Compare To Constant1	4	1
.../Subsystem1/Oximeter/Compare To Constant2	4	1
.../Subsystem1/Oximeter/Compare To Constant3	4	1
.../Subsystem1/Oximeter/Compare To Constant4	4	1
.../Subsystem1/Oximeter/Compare To Constant5	4	1
.../Subsystem1/Oximeter/Compare To Constant6	4	1
.../Subsystem1/Oximeter/Compare To Constant7	4	1
.../Subsystem1/Oximeter/Compare To Constant8	4	1
.../Subsystem1/Oximeter/Signal Builder	4	1
.../Subsystem2/Subsystem1/Platelet_Count	3	3
.../Subsystem1/Platelet_Count/Subsystem1	4	2
.../Subsystem1/Compare To Constant6	5	1
.../Subsystem1/Compare To Constant7	5	1
.../Subsystem1/Compare To Constant8	5	1

.../Subsystem1/Platelet_Count/Subsystem2	4	2
.../Subsystem2/Compare_To_Constant3	5	1
.../Subsystem2/Compare_To_Constant4	5	1
.../Subsystem2/Compare_To_Constant5	5	1
.../Subsystem1/Platelet_Count/Subsystem3	4	2
.../Subsystem3/Compare_To_Constant1	5	1
.../Subsystem3/Compare_To_Constant2	5	1
.../Subsystem3/Compare_To_Constant9	5	1
.../Subsystem2/Subsystem1/Subsystem	3	3
.../Subsystem1/Subsystem/Diastol_Elevated1	4	2
.../Subsystem/Diastol_Elevated1/121+Compare	5	1
.../Subsystem/Diastol_Elevated1/129-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht3	4	2
.../Subsystem/Diastol_Ht3/130+Compare	5	1
.../Subsystem/Diastol_Ht3/139-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht4	4	2
.../Subsystem/Diastol_Ht4/140+Compare	5	1
.../Subsystem/Diastol_Ht4/159-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Htcrisis1	4	2
.../Subsystem/Diastol_Htcrisis1/180+Compare	5	1
.../Subsystem/Diastol_Htcrisis1/260-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Low1	4	2
.../Subsystem/Diastol_Low1/100-Compare	5	1
.../Subsystem/Diastol_Low1/90+compare	5	1
.../Subsystem1/Subsystem/Diastol_Normal1	4	2
.../Subsystem/Diastol_Normal1/120Compare	5	1
.../Subsystem1/Subsystem/Systol_Elevated	4	2
.../Subsystem/Systol_Elevated/121+Compare	5	1
.../Subsystem/Systol_Elevated/129-Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht1	4	2
.../Subsystem/Systol_Ht1/130+Compare	5	1
.../Subsystem/Systol_Ht1/139-Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht2	4	2
.../Subsystem/Systol_Ht2/140+Compare	5	1
.../Subsystem/Systol_Ht2/159-Compare	5	1
.../Subsystem1/Subsystem/Systol_Htcrisis	4	2
.../Subsystem/Systol_Htcrisis/180+Compare	5	1
.../Subsystem/Systol_Htcrisis/260-Compare	5	1
.../Subsystem1/Subsystem/Systol_Low	4	2
.../Subsystem/Systol_Low/100-Compare	5	1
.../Subsystem/Systol_Low/90+compare	5	1
.../Subsystem1/Subsystem/Systol_Normal	4	2
.../Subsystem/Systol_Normal/120Compare	5	1
.../Subsystem2/Subsystem1/Thyroid_Check	3	2
.../Thyroid_Check/Compare_To_Normal	4	1
.../Compare_To_low_thyroid_symptomatic	4	1
.../Compare_To_low_thyroid_symptomatic	4	1
.../Compare_To_subclinical_low_thyroid	4	1
.../ompare_To_subclinical_overactive_thyroid	4	1
.../Subsystem2/Subsystem1/Urine_Analysis	3	2
.../Urine_Analysis/Compare_To_Constant	4	1
.../Urine_Analysis/Compare_To_Constant1	4	1
.../Urine_Analysis/Compare_To_Constant2	4	1
.../Urine_Analysis/Compare_To_Constant3	4	1
.../Urine_Analysis/Compare_To_Constant4	4	1
.../Urine_Analysis/Compare_To_Constant5	4	1
.../Urine_Analysis/Compare_To_Constant6	4	1

[^ Less](#)

⚠ Check for unconnected objects

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

Warning

The following lines, input ports, or output ports are not properly connected in system: Integrated_Model

- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)

- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

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Recommended Action

Connect the blocks specified in the list

☒ 2.24.1 High-Integrity Systems 0 0 29 0 34 33

☒ 2.24.1.1 Simulink 0 0 2 0 10 24

☒ Check usage of Abs blocks

Not Run

☒ Check usage of remainder and reciprocal operations

Not Run

☒ Check usage of square root operations

Not Run

☒ Check usage of log and log10 operations

Not Run

✓ 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

✓ Check usage of For and While Iterator subsystems

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

Passed

No sample time-dependent blocks in For or While Iterator subsystems.

☒ Check usage of For Iterator blocks

Not Run

☒ Check usage of If blocks and If Action Subsystem blocks

Not Run

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

Not Run

☒ Check usage of conditionally executed subsystems

Not Run

☒ Check usage of Merge blocks

Not Run

☒ Check relational comparisons on floating-point signals

Not Run

☒ Check usage of Relational Operator blocks

Not Run

☒ Check usage of Logical Operator blocks

Not Run

Check usage of bitwise operations

Not Run

⚠ 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.

Warning

The following blocks are not recommended for C/C++ production code generation:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

✓ Check for inconsistent vector indexing methods

Identify inconsistent usage of vector indexing methods across the model or subsystem.

Passed

No blocks found using inconsistent indexing modes.

Check data types for blocks with index signals

Not Run

✓ Check usage of variant blocks

Check variant block settings that might result in code that doesn't trace back to requirements.

Passed

No variant blocks have "VariantActivationTime" set to 'code compile'.

✓ 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

No lookup table blocks found to not generate out-of-range checking code.

Check usage of Signal Routing blocks

Not Run

✓ Check for root Imports with missing properties

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

Passed

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

Check for root Imports with missing range definitions

Not Run

Check for root Outports with missing range definitions

Not Run

Check usage of Reciprocal Sqrt blocks

Not Run

Check usage of Assignment blocks

Not Run

✓ Check 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

Not Run

█ Check data type of loop control variables

Not Run

█ Check for divide-by-zero calculations

Not Run

✓ Check for parameter tunability ignored for referenced models

Check for models parameter tunability information specified using Model Parameter Configuration dialog boxes.

Passed

No parameters found that lose the tunability defined in the referenced models.

█ Check usage of bit-shift operations

Not Run

⚠ Check safety-related diagnostic settings for variants

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Variant condition mismatch at signal source and destination (VariantConditionMismatch)	none	error

Recommended Action

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

✓ Check for disabled and parameterized library links

Identify disabled and parameterized library links in the model.

Passed

No blocks found that have disabled or parameterized library links.

█ Check for unreachable and dead code

Not Run

2.24.1.2 Stateflow

0 0 1 0 7 4

✓ Check state machine type of Stateflow charts

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 recursions

Not Run

⚠ Check Stateflow debugging options

Identify whether Stateflow debugging options are set appropriately.

Warning

The following Stateflow debugging options are not set appropriately:

Parameter	Current Value	Recommended Values
Wrap on overflow (IntegerOverflowMsg)	warning	error
Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

Change the Stateflow debugging options to the recommended value.

✓ 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

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

Not Run

✓ 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

✓ Check scoping of Stateflow data objects

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

Passed

All Stateflow data objects are properly scoped.

✓ Check Stateflow charts for uniquely defined data objects

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

Passed

No Stateflow data identifiers found to be defined in multiple scopes.

✗ Check assignment operations in Stateflow charts

Not Run

✗ Check Stateflow charts for unary operators

Not Run

✗ 2.24.1.3 MATLAB 0 0 0 0 0 7 4

✓ Check 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 Function interfaces with inherited complexity or data type properties found.

✓ Check MATLAB Function metrics

Identify MATLAB Functions that violate code and complexity metrics.

Passed

No MATLAB Function blocks found that violate code and complexity metrics.

✓ Check MATLAB Code Analyzer messages

Check MATLAB functions for %#codegen directive, MATLAB Code Analyzer messages, and justification message IDs.

Passed

No MATLAB Function blocks found with Code Analyzer messages, missing %#codegen directive or inappropriate usage of justification message IDs.

✓ 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

Not Run

✗ Check usage of logical operators and functions in MATLAB Function blocks

Not Run

✗ Check type and size of condition expressions

Not Run

✓ Check MATLAB functions not supported for code generation

Identify MATLAB functions that are not supported for code generation.

Passed

All identified MATLAB functions are supported for code generation.

✗ Metrics for generated code complexity

Not Run

✗ 2.24.1.4 Configuration -0 X0 A24 Y0 Z8 L0

⚠ 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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect read before write (ReadBeforeWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after read (WriteAfterReadMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after write (WriteAfterWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Duplicate data store names (UniqueDataStoreMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for saving

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	warning	error
Warning	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	warning	error

Recommended Action

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

✓ 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.

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	Show eliminated blocks (ShowEliminatedStatement)	off	on	GenerateComments
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	Verbose comments for 'Model default' storage class (ForceParamTrailComments)	off	on	GenerateComments
Warning	ReqsInCode	Prerequisite constraint not met.	on	SystemTargetFile, GenerateComments

Recommended Action

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

⚠ Check safety-related code generation interface settings

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

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	Support non-finite numbers (SupportNonFinite)	on	off	
Warning	SupportAbsoluteTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	IncludeMdlTerminateFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SuppressErrorStatus	Prerequisite constraint not met.	on	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	

Recommended Action

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

✓ Check safety-related solver settings for simulation time

Identify if the model Start time is set to 0 and Stop time is less than the Application Life Span.

Passed

No issues found with solver settings for simulation time.

⚠ Check safety-related solver settings for solver options

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

Warning

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

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

Recommended Action

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

✓ 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.

⚠ Check safety-related diagnostic settings for solvers

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Algebraic loop (AlgebraicLoopMsg)	warning	error
Warning	Minimize algebraic loop (ArtificialAlgebraicLoopMsg)	warning	error
Warning	Block priority violation (BlockPriorityViolationMsg)	warning	error
Warning	Automatic solver parameter selection (SolverPrmCheckMsg)	none	error
Warning	State name clash (StateNameClashWarn)	none	warning

Recommended Action

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

⚠ Check safety-related diagnostic settings for sample time

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Source block specifies -1 sample time (InheritedTslnSrcMsg)	warning	error
Warning	Enforce sample times specified by Signal Specification blocks (SigSpecEnsureSampleTimeMsg)	warning	error
Warning	Single task data transfer (SingleTaskRateTransMsg)	none	error
Warning	Tasks with equal priority (TasksWithSamePriorityMsg)	warning	error
Warning	Unspecified inheritability of sample time (UnknownTslnhSupMsg)	warning	error

Recommended Action

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

✓ 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

⚠ Check safety-related block reduction optimization settings

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

Warning

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

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

Recommended Action

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

⚠ 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.

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	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Maximum, Standards	SystemTargetFile
Warning	PreserveExpressionOrder	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

⚠ Check safety-related optimization settings for application lifespan

Check optimization settings in the model configuration that apply to application lifespan and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Application lifespan (days) (LifeSpan)	auto	inf

Recommended Action

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

⚠ Check safety-related code generation identifier settings

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Not Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target		
Warning	MangleLength	<i>Prerequisite constraint not met.</i>		1, 2, 3	SystemTargetFile

Recommended Action

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

⚠ Check safety-related optimization settings for data initialization

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	ZeroExternalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging
Warning	ZeroInternalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging

Recommended Action

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

* 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 apply to data type conversions and might impact safety.

Warning

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

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

Recommended Action

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

⚠ Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that apply to division arithmetic exceptions and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	NoFixptDivByZeroProtection	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile

Recommended Action

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

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

Check optimization settings in the model configuration that apply to specified minimum and maximum values and might impact safety.

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	UseSpecifiedMinMax	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

✓ Check safety-related settings for 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.

⚠ Check safety-related diagnostic settings for compatibility

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	S-function upgrades needed (SFcnCompatibilityMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for parameters

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect underflow (ParameterUnderflowMsg)	none	error
Warning	Detect precision loss (ParameterPrecisionLossMsg)	warning	error
Warning	Detect loss of tunability (ParameterTunabilityLossMsg)	warning	error

Recommended Action

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

✓ 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 diagnostic settings in the model configuration that affect model initialization and might impact safety.

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.

Warning

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

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

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Signal label mismatch (SignalLabelMismatchMsg)	none	error
Warning	Unconnected block input ports (UnconnectedInputMsg)	none	error
Warning	Unconnected block output ports (UnconnectedOutputMsg)	none	error
Warning	Unconnected line (UnconnectedLineMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for bus connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
--------	-----------	---------------	--------------------

Warning	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	warning	error
Warning	Element name mismatch (BusObjectLabelMismatch)	warning	error
Warning	Bus signal treated as vector (StrictBusMsg)	ErrorLevel1	ErrorOnBusTreatedAsVector
Warning	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	none	error

Recommended Action

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

✓ 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	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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	none	warning
Warning	Vector/matrix block input conversion (VectorMatrixConversionMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for model referencing

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Port and parameter mismatch (ModelReferenceOMismatchMessage)	none	error
Warning	Invalid root Inport/Outport block connection (ModelReferenceOMsg)	none	error
Warning	Unsupported data logging (ModelReferenceDataLoggingMessage)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for Stateflow

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Invalid input data access in chart initialization (\$FInvalidInputDataAccessInChartInitDiag)	warning	error
Warning	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	warning	error
Warning	Unreachable execution path (SFUnreachableExecutionPathDiag)	warning	error
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error
Warning	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	warning	error
Warning	Absolute time temporal value shorter than sampling period (SFTemporalDelaySmallerThanSampleTimeDiag)	warning	error
Warning	Self-transition on leaf state (SFSelfTransitionDiag)	warning	error
Warning	'Execute-at-initialization' disabled in presence of input events (SFEExecutionAtInitializationDiag)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal data

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Underspecified data types (UnderSpecifiedDataTypeMsg)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

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

☒ **2.24.1.5 Naming** -0 X0 A0 M0 ✓1 D1

✓ 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

Not Run

☒ **2.24.1.6 Requirements** -0 X0 A1 M0 ✓0 D0

⚠ Check for model elements that do not link to requirements

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

Warning

The following model elements do not link to a requirements document:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Subsystem](#)

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Recommended Action

For each model element in the list, in the Model Editor, right-click the model element, select Requirements, and specify a requirement. Check the [Traceability Matrix](#) for viewing requirements and their links to blocks in Simulink model in a compact format.

☒ **2.24.1.7 Code** -0 X0 A1 M0 ✓1 D0

✓ Check for blocks not recommended for MISRA C:2012

Passed

⚠ 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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	<i>Prerequisite constraint not met.</i>	off	UtilityFuncGeneration
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	SupportNonInlinedSFcns	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	
Warning	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Standards, Maximum	SystemTargetFile
Warning	CastingMode	<i>Prerequisite constraint not met.</i>	Standards	SystemTargetFile
Warning	InternalIdentifier	<i>Prerequisite constraint not met.</i>	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	EnableSignedRightShifts	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

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Recommended Action

Modify the configuration parameters listed above to the recommended values.

☒ 2.25 Modeling Standards for ISO 26262

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☒ Display configuration management data

Not Run

✓ Display model metrics and complexity report

Display number of elements and name, level, and depth of subsystems for the model or subsystem

Model metrics information

Display number of elements for Simulink blocks and Stateflow constructs

Summary

Element Type	Count
Import	49

Outport	54
SubSystem	104

Simulink

Block Type	Count
Constant	113
SubSystem	104
Switch	67
Outport	54
Inport	49
Display	24
Product	13
Logic	11
StringConstant	7
From	3
Goto	3
LampBlock	1
Scope	1
Demux	1
FromWorkspace	1

[^ Less](#)**Model complexity information**

Display name, level, and depth of subsystems

Maximum Subsystem Depth: 6

Subsystem Depth

Subsystem Name	Level	Depth
Integrated_Model/Subsystem2	1	5
Integrated_Model/Subsystem2/Subsystem1	2	4
.../Subsystem1/Blood_Classification	3	2
.../Blood_Classification/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Compare To Constant3	4	1
.../Compare To Constant4	4	1
.../Compare To Constant5	4	1
.../Compare To Constant6	4	1
.../Compare To Constant7	4	1
.../Subsystem1/Blood_Platelet_Count	3	2
.../Blood_Platelet_Count/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Subsystem1/Body_Temperature_Check	3	2
.../Celsius_to_Fahrenheit	4	1
.../Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Subsystem1/Condition Of Kidney	3	2
.../Condition Of Kidney/Compare To Constant	4	1
.../Condition Of Kidney/Compare To Constant1	4	1
.../Condition Of Kidney/Compare To Constant2	4	1
.../Condition Of Kidney/Compare To Constant3	4	1
.../Condition Of Kidney/Compare To Constant4	4	1
.../Subsystem2/Subsystem1/Glucometer	3	3
.../Subsystem1/Glucometer/Subsystem	4	2
.../Glucometer/Subsystem/Compare To Constant	5	1
.../Subsystem/Compare To Constant1	5	1
.../Subsystem/Compare To Constant2	5	1
.../Subsystem/Compare To Constant3	5	1
.../Subsystem2/Subsystem1/Oximeter	3	2
.../Subsystem1/Oximeter/Compare To Constant	4	1
.../Subsystem1/Oximeter/Compare To Constant1	4	1
.../Subsystem1/Oximeter/Compare To Constant2	4	1
.../Subsystem1/Oximeter/Compare To Constant3	4	1
.../Subsystem1/Oximeter/Compare To Constant4	4	1
.../Subsystem1/Oximeter/Compare To Constant5	4	1
.../Subsystem1/Oximeter/Compare To Constant6	4	1
.../Subsystem1/Oximeter/Compare To Constant7	4	1
.../Subsystem1/Oximeter/Compare To Constant8	4	1
.../Subsystem1/Oximeter/Signal Builder	4	1
.../Subsystem2/Subsystem1/Platelet_Count	3	3
.../Subsystem1/Platelet_Count/Subsystem1	4	2
.../Subsystem1/Compare To Constant6	5	1

.../Subsystem1/Compare To Constant7	5	1
.../Subsystem1/Compare To Constant8	5	1
.../Subsystem1/Platelet_Count/Subsystem2	4	2
.../Subsystem2/Compare To Constant3	5	1
.../Subsystem2/Compare To Constant4	5	1
.../Subsystem2/Compare To Constant5	5	1
.../Subsystem1/Platelet_Count/Subsystem3	4	2
.../Subsystem3/Compare To Constant1	5	1
.../Subsystem3/Compare To Constant2	5	1
.../Subsystem3/Compare To Constant9	5	1
.../Subsystem2/Subsystem1/Subsystem	3	3
.../Subsystem1/Subsystem/Diastol_Elevated1	4	2
.../Subsystem/Diastol_Elevated1/121+Compare	5	1
.../Subsystem/Diastol_Elevated1/129-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht3	4	2
.../Subsystem/Diastol_Ht3/130+Compare	5	1
.../Subsystem/Diastol_Ht3/139-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht4	4	2
.../Subsystem/Diastol_Ht4/140+Compare	5	1
.../Subsystem/Diastol_Ht4/159-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Htcrisis1	4	2
.../Subsystem/Diastol_Htcrisis1/180+Compare	5	1
.../Subsystem/Diastol_Htcrisis1/260-Compare	5	1
.../Subsystem1/Subsystem/Diastol_Low1	4	2
.../Subsystem/Diastol_Low1/100-Compare	5	1
.../Subsystem/Diastol_Low1/90+compare	5	1
.../Subsystem1/Subsystem/Diastol_Normal1	4	2
.../Subsystem/Diastol_Normal1/120Compare	5	1
.../Subsystem1/Subsystem/Systol_Elevated	4	2
.../Subsystem/Systol_Elevated/121+Compare	5	1
.../Subsystem/Systol_Elevated/129-Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht1	4	2
.../Subsystem/Systol_Ht1/130+Compare	5	1
.../Subsystem/Systol_Ht1/139-Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht2	4	2
.../Subsystem/Systol_Ht2/140+Compare	5	1
.../Subsystem/Systol_Ht2/159-Compare	5	1
.../Subsystem1/Subsystem/Systol_Htcrisis	4	2
.../Subsystem/Systol_Htcrisis/180+Compare	5	1
.../Subsystem/Systol_Htcrisis/260-Compare	5	1
.../Subsystem1/Subsystem/Systol_Low	4	2
.../Subsystem/Systol_Low/100-Compare	5	1
.../Subsystem/Systol_Low/90+compare	5	1
.../Subsystem1/Subsystem/Systol_Normal	4	2
.../Subsystem/Systol_Normal/120Compare	5	1
.../Subsystem2/Subsystem1/Thyroid_Check	3	2
.../Thyroid_Check/Compare To Normal	4	1
.../Compare_To_low_thyroid_symptomatic	4	1
.../Compare_To_low_thyroid_symptomatic	4	1
.../Compare_To_subclinical_low_thyroid	4	1
.../Compare_To_subclinical_overactive_thyroid	4	1
.../Subsystem2/Subsystem1/Urine_Analysis	3	2
.../Urine_Analysis/Compare To Constant	4	1
.../Urine_Analysis/Compare To Constant1	4	1
.../Urine_Analysis/Compare To Constant2	4	1
.../Urine_Analysis/Compare To Constant3	4	1
.../Urine_Analysis/Compare To Constant4	4	1
.../Urine_Analysis/Compare To Constant5	4	1
.../Urine_Analysis/Compare To Constant6	4	1

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⚠ Check for unconnected objects

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

Warning

The following lines, input ports, or output ports are not properly connected in system: Integrated_Model

- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Out1](#)

- [Integrated Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/In2](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Out1](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Out2](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

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Recommended Action

Connect the blocks specified in the list

☒ 2.25.1 High-Integrity Systems ⚡0 ✘0 ⚡29 ✕0 ✓34 📄33

☒ 2.25.1.1 Simulink ⚡0 ✘0 ⚡2 ✕0 ✓10 📄24

☒ Check usage of Abs blocks

Not Run

☒ Check usage of remainder and reciprocal operations

Not Run

☒ Check usage of square root operations

Not Run

☒ Check usage of log and log10 operations

Not Run

✓ 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

✓ Check usage of For and While Iterator subsystems

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

Passed

No sample time-dependent blocks in For or While Iterator subsystems.

☒ Check usage of For Iterator blocks

Not Run

☒ Check usage of If blocks and If Action Subsystem blocks

Not Run

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

Not Run

☒ Check usage of conditionally executed subsystems

Not Run

☒ Check usage of Merge blocks

Not Run

☒ Check relational comparisons on floating-point signals

Not Run

☒ Check usage of Relational Operator blocks

Not Run

Check usage of Logical Operator blocks

Not Run

Check usage of bitwise operations

Not Run

⚠ 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.

Warning

The following blocks are not recommended for C/C++ production code generation:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

✓ Check for inconsistent vector indexing methods

Identify inconsistent usage of vector indexing methods across the model or subsystem.

Passed

No blocks found using inconsistent indexing modes.

█ Check data types for blocks with index signals

Not Run

✓ Check usage of variant blocks

Check variant block settings that might result in code that doesn't trace back to requirements.

Passed

No variant blocks have "VariantActivationTime" set to 'code compile'.

✓ 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

No lookup table blocks found to not generate out-of-range checking code.

█ Check usage of Signal Routing blocks

Not Run

✓ Check for root Imports with missing properties

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

Passed

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

█ Check for root Imports with missing range definitions

Not Run

█ Check for root Outports with missing range definitions

Not Run

█ Check usage of Reciprocal Sqrt blocks

Not Run

█ Check usage of Assignment blocks

Not Run

✓ Check 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

Not Run

✗ Check data type of loop control variables

Not Run

✗ Check for divide-by-zero calculations

Not Run

✓ Check for parameter tunability ignored for referenced models

Check for models parameter tunability information specified using Model Parameter Configuration dialog boxes.

Passed

No parameters found that lose the tunability defined in the referenced models.

✗ Check usage of bit-shift operations

Not Run

⚠ Check safety-related diagnostic settings for variants

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Variant condition mismatch at signal source and destination (VariantConditionMismatch)	none	error

Recommended Action

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

✓ Check for disabled and parameterized library links

Identify disabled and parameterized library links in the model.

Passed

No blocks found that have disabled or parameterized library links.

✗ Check for unreachable and dead code

Not Run

2.25.1.2 Stateflow 0 0 1 0 7 4

✓ Check state machine type of Stateflow charts

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 recursions

Not Run

⚠ Check Stateflow debugging options

Identify whether Stateflow debugging options are set appropriately.

Warning

The following Stateflow debugging options are not set appropriately:

Parameter	Current Value	Recommended Values
Wrap on overflow.(IntegerOverflowMsg)	warning	error
Simulation range checking.(SignalRangeChecking)	none	error

Recommended Action

Change the Stateflow debugging options to the recommended value.

✓ 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

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

Not Run

✓ 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

✓ Check scoping of Stateflow data objects

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

Passed

All Stateflow data objects are properly scoped.

✓ Check Stateflow charts for uniquely defined data objects

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

Passed

No Stateflow data identifiers found to be defined in multiple scopes.

☰ Check assignment operations in Stateflow charts

Not Run

☰ Check Stateflow charts for unary operators

Not Run

☒ **2.25.1.3 MATLAB** ⚡ 0 ⚠ 0 ⚡ 0 ⚡ 7 ⌂ 4

✓ Check 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 Function interfaces with inherited complexity or data type properties found.

Check MATLAB Function metrics

Identify MATLAB Functions that violate code and complexity metrics.

Passed

No MATLAB Function blocks found that violate code and complexity metrics.

Check MATLAB Code Analyzer messages

Check MATLAB functions for %#codegen directive, MATLAB Code Analyzer messages, and justification message IDs.

Passed

No MATLAB Function blocks found with Code Analyzer messages, missing %#codegen directive or inappropriate usage of justification message IDs.

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

Not Run

Check usage of logical operators and functions in MATLAB Function blocks

Not Run

Check type and size of condition expressions

Not Run

Check MATLAB functions not supported for code generation

Identify MATLAB functions that are not supported for code generation.

Passed

All identified MATLAB functions are supported for code generation.

Metrics for generated code complexity

Not Run

2.25.1.4 Configuration

- 0 X 0 ! 24 V 0 ✓ 8 D 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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect read before write (ReadBeforeWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after read (WriteAfterReadMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after write (WriteAfterWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Duplicate data store names.(UniqueDataStoreMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for saving

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	warning	error
Warning	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	warning	error

Recommended Action

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

✓ 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.

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	Show eliminated blocks (ShowEliminatedStatement)	off	on	GenerateComments
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	Verbose comments for 'Model default' storage class (ForceParamTrailComments)	off	on	GenerateComments
Warning	ReqslnCode	Prerequisite constraint not met.	on	SystemTargetFile, GenerateComments

Recommended Action

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

⚠ Check safety-related code generation interface settings

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

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	Support non-finite numbers (SupportNonFinite)	on	off	
Warning	SupportAbsoluteTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	IncludeMdlTerminateFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SuppressErrorStatus	Prerequisite constraint not met.	on	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	

Recommended Action

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

✓ Check safety-related solver settings for simulation time

Identify if the model Start time is set to 0 and Stop time is less than the Application Life Span.

Passed

No issues found with solver settings for simulation time.

⚠ Check safety-related solver settings for solver options

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

Warning

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

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

Recommended Action

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

✓ 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.

⚠ Check safety-related diagnostic settings for solvers

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Algebraic loop (AlgebraicLoopMsg)	warning	error
Warning	Minimize algebraic loop (ArtificialAlgebraicLoopMsg)	warning	error
Warning	Block priority violation (BlockPriorityViolationMsg)	warning	error
Warning	Automatic solver parameter selection (SolverPrmCheckMsg)	none	error
Warning	State name clash (StateNameClashWarn)	none	warning

Recommended Action

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

⚠ Check safety-related diagnostic settings for sample time

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Source block specifies -1 sample time (InheritedTslnSrcMsg)	warning	error
Warning	Enforce sample times specified by Signal Specification blocks (SigSpecEnsureSampleTimeMsg)	warning	error
Warning	Single task data transfer (SingleTaskRateTransMsg)	none	error
Warning	Tasks with equal priority (TasksWithSamePriorityMsg)	warning	error
Warning	Unspecified inheritability of sample time (UnknownTslnhSupMsg)	warning	error

Recommended Action

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

✓ 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

⚠ Check safety-related block reduction optimization settings

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

Warning

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

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

Recommended Action

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

⚠ 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.

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	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Maximum, Standards	SystemTargetFile
Warning	PreserveExpressionOrder	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

⚠ Check safety-related optimization settings for application lifespan

Check optimization settings in the model configuration that apply to application lifespan and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Application lifespan (days) (LifeSpan)	auto	inf

Recommended Action

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

⚠ Check safety-related code generation identifier settings

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Not Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target		
Warning	MangleLength	<i>Prerequisite constraint not met.</i>		1, 2, 3	SystemTargetFile

Recommended Action

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

⚠ Check safety-related optimization settings for data initialization

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	ZeroExternalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging
Warning	ZerointernalMemoryAtStartup*	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile, CodeInterfacePackaging

Recommended Action

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

* 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 apply to data type conversions and might impact safety.

Warning

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

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

Recommended Action

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

⚠ Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that apply to division arithmetic exceptions and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	NoFixptDivByZeroProtection	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile

Recommended Action

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

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

Check optimization settings in the model configuration that apply to specified minimum and maximum values and might impact safety.

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	UseSpecifiedMinMax	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

✓ Check safety-related settings for 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.

⚠ Check safety-related diagnostic settings for compatibility

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	S-function upgrades needed (SFcnCompatibilityMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for parameters

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect underflow_(ParameterUnderflowMsg)	none	error
Warning	Detect precision loss_(ParameterPrecisionLossMsg)	warning	error
Warning	Detect loss of tunability_(ParameterTunabilityLossMsg)	warning	error

Recommended Action

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

✓ 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 diagnostic settings in the model configuration that affect model initialization and might impact safety.

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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Model Verification block enabling_(AssertControl)	UseLocalSettings	DisableAll

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Signal label mismatch_(SignalLabelMismatchMsg)	none	error
Warning	Unconnected block input ports_(UnconnectedInputMsg)	none	error
Warning	Unconnected block output ports_(UnconnectedOutputMsg)	none	error
Warning	Unconnected line_(UnconnectedLineMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for bus connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	warning	error
Warning	Element name mismatch (BusObjectLabelMismatch)	warning	error
Warning	Bus signal treated as vector (StrictBusMsg)	ErrorLevel1	ErrorOnBusTreatedAsVector
Warning	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	none	error

Recommended Action

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

✓ 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	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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	none	warning
Warning	Vector/matrix block input conversion (VectorMatrixConversionMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for model referencing

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Port and parameter mismatch (ModelReferenceOMismatchMessage)	none	error
Warning	Invalid root Inport/Outport block connection (ModelReferenceOMsg)	none	error
Warning	Unsupported data logging (ModelReferenceDataLoggingMessage)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for Stateflow

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Invalid input data access in chart initialization (SFInvalidInputDataAccessInChartInitDiag)	warning	error
Warning	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	warning	error
Warning	Unreachable execution path (SFUnreachableExecutionPathDiag)	warning	error
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error
Warning	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	warning	error
Warning	Absolute time temporal value shorter than sampling period (SFTemporalDelaySmallerThanSampleTimeDiag)	warning	error
Warning	Self-transition on leaf state (SFSelfTransitionDiag)	warning	error
Warning	'Execute-at-initialization' disabled in presence of input events (SFExecutionAtInitializationDiag)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal data

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Underspecified data types (UnderSpecifiedDataTypeMsg)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

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

☒ 2.25.1.5 Naming ⚡0 ✘0 ⚠0 ✎0 ✓1 📄1

✓ 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

Not Run

☒ 2.25.1.6 Requirements ⚡0 ✘0 ⚠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.

Warning

The following model elements do not link to a requirements document:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Subsystem](#)

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Recommended Action

For each model element in the list, in the Model Editor, right-click the model element, select Requirements, and specify a requirement. Check the [Traceability Matrix](#) for viewing requirements and their links to blocks in Simulink model in a compact format.

2.25.1.7 Code 0 0 1 0 1 0

✓ Check for blocks not recommended for MISRA C:2012

Passed

⚠ 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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	<i>Prerequisite constraint not met.</i>	off	UtilityFuncGeneration
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	SupportNonInlinedSFcns	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	
Warning	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Standards, Maximum	SystemTargetFile
Warning	CastingMode	<i>Prerequisite constraint not met.</i>	Standards	SystemTargetFile
Warning	InternalIdentifier	<i>Prerequisite constraint not met.</i>	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	EnableSignedRightShifts	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

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Recommended Action

Modify the configuration parameters listed above to the recommended values.

2.26 Modeling Standards for ISO 25119 0 0 30 0 35 34

Display configuration management data

Not Run

Display model metrics and complexity report

Display number of elements and name, level, and depth of subsystems for the model or subsystem

Model metrics information

Display number of elements for Simulink blocks and Stateflow constructs

Summary

Element Type	Count
Import	49
Outport	54
SubSystem	104

Simulink

Block Type	Count
Constant	113
SubSystem	104
Switch	67
Outport	54
Import	49
Display	24
Product	13
Logic	11
StringConstant	7
From	3
Goto	3
LampBlock	1
Scope	1
Demux	1
FromWorkspace	1

[^ Less](#)

Model complexity information

Display name, level, and depth of subsystems

Maximum Subsystem Depth: 6

Subsystem Depth

Subsystem Name	Level	Depth
Integrated_Model/Subsystem2	1	5
Integrated_Model/Subsystem2/Subsystem1	2	4
.../Subsystem1/Blood_Classification	3	2
.../Blood_Classification/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Compare To Constant3	4	1
.../Compare To Constant4	4	1
.../Compare To Constant5	4	1
.../Compare To Constant6	4	1
.../Compare To Constant7	4	1
.../Subsystem1/Blood_Platelet_Count	3	2
.../Blood_Platelet_Count/Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Compare To Constant2	4	1
.../Subsystem1/Body_Temperature_Check	3	2
.../Celsius to Fahrenheit	4	1
.../Compare To Constant	4	1
.../Compare To Constant1	4	1
.../Subsystem1/Condition Of Kidney	3	2
.../Condition Of Kidney/Compare To Constant	4	1
.../Condition Of Kidney/Compare To Constant1	4	1
.../Condition Of Kidney/Compare To Constant2	4	1
.../Condition Of Kidney/Compare To Constant3	4	1
.../Condition Of Kidney/Compare To Constant4	4	1
.../Subsystem2/Subsystem1/Glucometer	3	3
.../Subsystem1/Glucometer/Subsystem	4	2
.../Glucometer/Subsystem/Compare To Constant	5	1
.../Subsystem/Compare To Constant1	5	1
.../Subsystem/Compare To Constant2	5	1
.../Subsystem/Compare To Constant3	5	1
.../Subsystem2/Subsystem1/Oximeter	3	2
.../Subsystem1/Oximeter/Compare To Constant	4	1
.../Subsystem1/Oximeter/Compare To Constant1	4	1
.../Subsystem1/Oximeter/Compare To Constant2	4	1
.../Subsystem1/Oximeter/Compare To Constant3	4	1

.../Subsystem1/Oximeter/Compare To Constant4	4	1
.../Subsystem1/Oximeter/Compare To Constant5	4	1
.../Subsystem1/Oximeter/Compare To Constant6	4	1
.../Subsystem1/Oximeter/Compare To Constant7	4	1
.../Subsystem1/Oximeter/Compare To Constant8	4	1
.../Subsystem1/Oximeter/Signal Builder	4	1
.../Subsystem2/Subsystem1/Platelet_Count	3	3
.../Subsystem1/Platelet_Count/Subsystem1	4	2
.../Subsystem1/Compare To Constant6	5	1
.../Subsystem1/Compare To Constant7	5	1
.../Subsystem1/Compare To Constant8	5	1
.../Subsystem1/Platelet_Count/Subsystem2	4	2
.../Subsystem2/Compare To Constant3	5	1
.../Subsystem2/Compare To Constant4	5	1
.../Subsystem2/Compare To Constant5	5	1
.../Subsystem1/Platelet_Count/Subsystem3	4	2
.../Subsystem3/Compare To Constant1	5	1
.../Subsystem3/Compare To Constant2	5	1
.../Subsystem3/Compare To Constant9	5	1
.../Subsystem2/Subsystem1/Subsystem	3	3
.../Subsystem1/Subsystem/Diastol_Elevated1	4	2
.../Subsystem/Diastol_Elevated1/121+Compare	5	1
.../Subsystem/Diastol_Elevated1/129+Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht3	4	2
.../Subsystem/Diastol_Ht3/130+Compare	5	1
.../Subsystem/Diastol_Ht3/139+Compare	5	1
.../Subsystem1/Subsystem/Diastol_Ht4	4	2
.../Subsystem/Diastol_Ht4/140+Compare	5	1
.../Subsystem/Diastol_Ht4/159+Compare	5	1
.../Subsystem1/Subsystem/Diastol_Hcrisis1	4	2
.../Subsystem/Diastol_Hcrisis1/180+Compare	5	1
.../Subsystem/Diastol_Hcrisis1/260+Compare	5	1
.../Subsystem1/Subsystem/Diastol_Low1	4	2
.../Subsystem/Diastol_Low1/100+Compare	5	1
.../Subsystem/Diastol_Low1/90+compare	5	1
.../Subsystem1/Subsystem/Diastol_Normal1	4	2
.../Subsystem/Diastol_Normal1/120Compare	5	1
.../Subsystem1/Subsystem/Systol_Elevated	4	2
.../Subsystem/Systol_Elevated/121+Compare	5	1
.../Subsystem/Systol_Elevated/129+Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht1	4	2
.../Subsystem/Systol_Ht1/130+Compare	5	1
.../Subsystem/Systol_Ht1/139+Compare	5	1
.../Subsystem1/Subsystem/Systol_Ht2	4	2
.../Subsystem/Systol_Ht2/140+Compare	5	1
.../Subsystem/Systol_Ht2/159+Compare	5	1
.../Subsystem1/Subsystem/Systol_Hcrisis	4	2
.../Subsystem/Systol_Hcrisis/180+Compare	5	1
.../Subsystem/Systol_Hcrisis/260+Compare	5	1
.../Subsystem1/Subsystem/Systol_Low	4	2
.../Subsystem/Systol_Low/100+Compare	5	1
.../Subsystem/Systol_Low/90+compare	5	1
.../Subsystem1/Subsystem/Systol_Normal	4	2
.../Subsystem/Systol_Normal/120Compare	5	1
.../Subsystem2/Subsystem1/Thyroid_Check	3	2
.../Thyroid_Check/Compare To Normal	4	1
.../Compare To low thyroid symptomatic	4	1
.../Compare To low thyroid symptomatic	4	1
.../Compare To subclinical low thyroid	4	1
.../Compare To subclinical overactive thyroid	4	1
.../Subsystem2/Subsystem1/Urine_Analysis	3	2
.../Urine_Analysis/Compare To Constant	4	1
.../Urine_Analysis/Compare To Constant1	4	1
.../Urine_Analysis/Compare To Constant2	4	1
.../Urine_Analysis/Compare To Constant3	4	1
.../Urine_Analysis/Compare To Constant4	4	1
.../Urine_Analysis/Compare To Constant5	4	1
.../Urine_Analysis/Compare To Constant6	4	1

[^ Less](#)

⚠ Check for unconnected objects

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

Warning

The following lines, input ports, or output ports are not properly connected in system: Integrated_Model

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

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Recommended Action

Connect the blocks specified in the list

2.26.1 High-Integrity Systems 0 0 29 0 34 33

2.26.1.1 Simulink 0 0 2 0 10 24

Check usage of Abs blocks

Not Run

Check usage of remainder and reciprocal operations

Not Run

Check usage of square root operations

Not Run

Check usage of log and log10 operations

Not Run

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

Check usage of For and While Iterator subsystems

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

Passed

No sample time-dependent blocks in For or While Iterator subsystems.

Check usage of For Iterator blocks

Not Run

Check usage of If blocks and If Action Subsystem blocks

Not Run

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

Not Run

Check usage of conditionally executed subsystems

Not Run

Check usage of Merge blocks

Not Run

Check relational comparisons on floating-point signals

Not Run

Check usage of Relational Operator blocks

Not Run

Check usage of Logical Operator blocks

Not Run

Check usage of bitwise operations

Not Run

⚠ 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.

Warning

The following blocks are not recommended for C/C++ production code generation:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

✓ Check for inconsistent vector indexing methods

Identify inconsistent usage of vector indexing methods across the model or subsystem.

Passed

No blocks found using inconsistent indexing modes.

§ Check data types for blocks with index signals

Not Run

✓ Check usage of variant blocks

Check variant block settings that might result in code that doesn't trace back to requirements.

Passed

No variant blocks have "VariantActivationTime" set to 'code compile'.

✓ 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

No lookup table blocks found to not generate out-of-range checking code.

§ Check usage of Signal Routing blocks

Not Run

✓ Check for root Imports with missing properties

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

Passed

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

§ Check for root Imports with missing range definitions

Not Run

§ Check for root Outports with missing range definitions

Not Run

§ Check usage of Reciprocal Sqrt blocks

Not Run

Check usage of Assignment blocks

Not Run

Check 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

Not Run

Check data type of loop control variables

Not Run

Check for divide-by-zero calculations

Not Run

Check for parameter tunability ignored for referenced models

Check for models parameter tunability information specified using Model Parameter Configuration dialog boxes.

Passed

No parameters found that lose the tunability defined in the referenced models.

Check usage of bit-shift operations

Not Run

Check safety-related diagnostic settings for variants

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Variant condition mismatch at signal source and destination (VariantConditionMismatch)	none	error

Recommended Action

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

Check for disabled and parameterized library links

Identify disabled and parameterized library links in the model.

Passed

No blocks found that have disabled or parameterized library links.

Check for unreachable and dead code

Not Run

2.26.1.2 Stateflow 0 X0 A1 M0 C7 D4**Check state machine type of Stateflow charts**

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 recursions

Not Run

⚠ Check Stateflow debugging options

Identify whether Stateflow debugging options are set appropriately.

Warning

The following Stateflow debugging options are not set appropriately:

Parameter	Current Value	Recommended Values
Wrap on overflow_(IntegerOverflowMsg)	warning	error
Simulation range checking_(SignalRangeChecking)	none	error

Recommended Action

Change the Stateflow debugging options to the recommended value.

✓ 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

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

Not Run

✓ 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

✓ Check scoping of Stateflow data objects

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

Passed

All Stateflow data objects are properly scoped.

✓ Check Stateflow charts for uniquely defined data objects

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

Passed

No Stateflow data identifiers found to be defined in multiple scopes.

❑ Check assignment operations in Stateflow charts

Not Run

❑ Check Stateflow charts for unary operators

Not Run

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 Function interfaces with inherited complexity or data type properties found.

Check MATLAB Function metrics

Identify MATLAB Functions that violate code and complexity metrics.

Passed

No MATLAB Function blocks found that violate code and complexity metrics.

Check MATLAB Code Analyzer messages

Check MATLAB functions for %#codegen directive, MATLAB Code Analyzer messages, and justification message IDs.

Passed

No MATLAB Function blocks found with Code Analyzer messages, missing %#codegen directive or inappropriate usage of justification message IDs.

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

Not Run

Check usage of logical operators and functions in MATLAB Function blocks

Not Run

Check type and size of condition expressions

Not Run

Check MATLAB functions not supported for code generation

Identify MATLAB functions that are not supported for code generation.

Passed

All identified MATLAB functions are supported for code generation.

Metrics for generated code complexity

Not Run

2.26.1.4 Configuration 0 0 24 8 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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect read before write (ReadBeforeWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after read (WriteAfterReadMsg)	UseLocalSettings	EnableAllAsError

Warning	Detect write after write (WriteAfterWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Duplicate data store names (UniqueDataStoreMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for saving

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	warning	error
Warning	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	warning	error

Recommended Action

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

✓ 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.

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	Show eliminated blocks (ShowEliminatedStatement)	off	on	GenerateComments
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	Verbose comments for 'Model default' storage class (ForceParamTrailComments)	off	on	GenerateComments
Warning	ReqInCode	Prerequisite constraint not met.	on	SystemTargetFile, GenerateComments

Recommended Action

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

⚠ Check safety-related code generation interface settings

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

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	Support non-finite numbers (SupportNonFinite)	on	off	
Warning	SupportAbsoluteTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile
Warning	IncludeMdlTerminateFcn	Prerequisite constraint not met.	off	SystemTargetFile

Warning	SuppressErrorStatus	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	

Recommended Action

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

✓ Check safety-related solver settings for simulation time

Identify if the model Start time is set to 0 and Stop time is less than the Application Life Span.

Passed

No issues found with solver settings for simulation time.

⚠ Check safety-related solver settings for solver options

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

Warning

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

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

Recommended Action

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

✓ 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.

⚠ Check safety-related diagnostic settings for solvers

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Algebraic loop (AlgebraicLoopMsg)	warning	error
Warning	Minimize algebraic loop (ArtificialAlgebraicLoopMsg)	warning	error
Warning	Block priority violation (BlockPriorityViolationMsg)	warning	error
Warning	Automatic solver parameter selection (SolverPrmCheckMsg)	none	error
Warning	State name clash (StateNameClashWarn)	none	warning

Recommended Action

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

⚠ Check safety-related diagnostic settings for sample time

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Source block specifies -1 sample time (InheritedTslnSrcMsg)	warning	error
Warning	Enforce sample times specified by Signal Specification blocks (SigSpecEnsureSampleTimeMsg)	warning	error
Warning	Single task data transfer (SingleTaskRateTransMsg)	none	error
Warning	Tasks with equal priority (TasksWithSamePriorityMsg)	warning	error
Warning	Unspecified inheritability of sample time (UnknownTslnhSupMsg)	warning	error

Recommended Action

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

✓ 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

⚠ Check safety-related block reduction optimization settings

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

Warning

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

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

Recommended Action

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

⚠ 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.

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	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Maximum, Standards	SystemTargetFile
Warning	PreserveExpressionOrder	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

⚠ Check safety-related optimization settings for application lifespan

Check optimization settings in the model configuration that apply to application lifespan and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Application lifespan (days) (LifeSpan)	auto	inf

Recommended Action

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

⚠ Check safety-related code generation identifier settings

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Not Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target		
Warning	MangleLength	<i>Prerequisite constraint not met.</i>		1, 2, 3	SystemTargetFile

Recommended Action

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

⚠ Check safety-related optimization settings for data initialization

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites

		Non-ERT based target	ERT based target	
D - Warning	System target file (SystemTargetFile)			
Warning	ZeroExternalMemoryAtStartup*	Prerequisite constraint not met.	on	SystemTargetFile, CodeInterfacePackaging
Warning	ZeroInternalMemoryAtStartup*	Prerequisite constraint not met.	on	SystemTargetFile, CodeInterfacePackaging

Recommended Action

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

* 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 apply to data type conversions and might impact safety.

Warning

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

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

Recommended Action

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

⚠ Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that apply to division arithmetic exceptions and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	NoFixptDivByZeroProtection	Prerequisite constraint not met.	off	SystemTargetFile

Recommended Action

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

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

Check optimization settings in the model configuration that apply to specified minimum and maximum values and might impact safety.

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	UseSpecifiedMinMax	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

✓ Check safety-related settings for 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.

⚠ Check safety-related diagnostic settings for compatibility

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	S-function upgrades needed (SFcnCompatibilityMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for parameters

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect underflow (ParameterUnderflowMsg)	none	error
Warning	Detect precision loss (ParameterPrecisionLossMsg)	warning	error
Warning	Detect loss of tunability (ParameterTunabilityLossMsg)	warning	error

Recommended Action

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

✓ 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 diagnostic settings in the model configuration that affect model initialization and might impact safety.

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.

Warning

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

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

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Signal label mismatch (SignalLabelMismatchMsg)	none	error
Warning	Unconnected block input ports (UnconnectedInputMsg)	none	error
Warning	Unconnected block output ports (UnconnectedOutputMsg)	none	error
Warning	Unconnected line (UnconnectedLineMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for bus connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	warning	error
Warning	Element name mismatch (BusObjectLabelMismatch)	warning	error
Warning	Bus signal treated as vector (StrictBusMsg)	ErrorLevel1	ErrorOnBusTreatedAsVector
Warning	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	none	error

Recommended Action

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

✓ 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	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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	none	warning
Warning	Vector/matrix block input conversion (VectorMatrixConversionMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for model referencing

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Port and parameter mismatch (ModelReferenceOMismatchMessage)	none	error
Warning	Invalid root Inport/Outport block connection (ModelReferenceOMsg)	none	error
Warning	Unsupported data logging (ModelReferenceDataLoggingMessage)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for Stateflow

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Invalid input data access in chart initialization (SFInvalidInputDataAccessInChartInitDiag)	warning	error
Warning	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	warning	error
Warning	Unreachable execution path (SFUnreachableExecutionPathDiag)	warning	error
Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error
Warning	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	warning	error

Warning	Absolute time temporal value shorter than sampling period (SFTemporalDelaySmallerThanSampleTimeDiag)	warning	error
Warning	Self-transition on leaf state (SFSelfTransitionDiag)	warning	error
Warning	'Execute-at-initialization' disabled in presence of input events (SFEExecutionAtInitializationDiag)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal data

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Underspecified data types (UnderSpecifiedDataTypeMsg)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

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

☒ 2.26.1.5 Naming 0 0 0 1 1

✓ 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

Not Run

☒ 2.26.1.6 Requirements 0 0 1 0 0

⚠ Check for model elements that do not link to requirements

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

Warning

The following model elements do not link to a requirements document:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Subsystem](#)

[^ Less](#)
Recommended Action

For each model element in the list, in the Model Editor, right-click the model element, select Requirements, and specify a requirement. Check the [Traceability Matrix](#) for viewing requirements and their links to blocks in Simulink model in a compact format.

[2.26.1.7 Code](#) 0 1 0 1 0

Check for blocks not recommended for MISRA C:2012

Passed

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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	<i>Prerequisite constraint not met.</i>	off	UtilityFuncGeneration
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	SupportNonInlinedSFcns	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	
Warning	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Standards, Maximum	SystemTargetFile
Warning	CastingMode	<i>Prerequisite constraint not met.</i>	Standards	SystemTargetFile
Warning	InternalIdentifier	<i>Prerequisite constraint not met.</i>	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	EnableSignedRightShifts	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

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Recommended Action

Modify the configuration parameters listed above to the recommended values.

[2.27 Modeling Standards for EN 50128/EN 50657](#) 0 30 0 35 34

[Display configuration management data](#)

Not Run

Display model metrics and complexity report

Display number of elements and name, level, and depth of subsystems for the model or subsystem

Model metrics information

Display number of elements for Simulink blocks and Stateflow constructs

Summary

Element Type	Count
Import	49
Outport	54
SubSystem	104

Simulink

Block Type	Count
Constant	113
SubSystem	104
Switch	67
Outport	54
Import	49
Display	24
Product	13
Logic	11
StringConstant	7
From	3
Goto	3
LampBlock	1
Scope	1
Demux	1
FromWorkspace	1

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Model complexity information

Display name, level, and depth of subsystems

Maximum Subsystem Depth: 6

Subsystem Depth

Subsystem Name	Level	Depth
Integrated_Model/Subsystem2	1	5
Integrated_Model/Subsystem2/Subsystem1	2	4
.../Subsystem1/Blood_Classification	3	2
.../Blood_Classification/Compare_To_Constant	4	1
.../Compare_To_Constant1	4	1
.../Compare_To_Constant2	4	1
.../Compare_To_Constant3	4	1
.../Compare_To_Constant4	4	1
.../Compare_To_Constant5	4	1
.../Compare_To_Constant6	4	1
.../Compare_To_Constant7	4	1
.../Subsystem1/Blood_Platelet_Count	3	2
.../Blood_Platelet_Count/Compare_To_Constant	4	1
.../Compare_To_Constant1	4	1
.../Compare_To_Constant2	4	1
.../Subsystem1/Body_Temperature_Check	3	2
.../Celsius_to_Fahrenheit	4	1
.../Compare_To_Constant	4	1
.../Compare_To_Constant1	4	1
.../Subsystem1/Condition_Of_Kidney	3	2
.../Condition_Of_Kidney/Compare_To_Constant	4	1
.../Condition_Of_Kidney/Compare_To_Constant1	4	1
.../Condition_Of_Kidney/Compare_To_Constant2	4	1
.../Condition_Of_Kidney/Compare_To_Constant3	4	1
.../Condition_Of_Kidney/Compare_To_Constant4	4	1
.../Subsystem2/Subsystem1/Glucometer	3	3
.../Subsystem1/Glucometer/Subsystem	4	2
.../Glucometer/Subsystem/Compare_To_Constant	5	1
.../Subsystem/Compare_To_Constant1	5	1
.../Subsystem/Compare_To_Constant2	5	1
.../Subsystem/Compare_To_Constant3	5	1
.../Subsystem2/Subsystem1/Oximeter	3	2
.../Subsystem1/Oximeter/Compare_To_Constant	4	1

.../Subsystem1/Oximeter/Compare To Constant1	4	1
.../Subsystem1/Oximeter/Compare To Constant2	4	1
.../Subsystem1/Oximeter/Compare To Constant3	4	1
.../Subsystem1/Oximeter/Compare To Constant4	4	1
.../Subsystem1/Oximeter/Compare To Constant5	4	1
.../Subsystem1/Oximeter/Compare To Constant6	4	1
.../Subsystem1/Oximeter/Compare To Constant7	4	1
.../Subsystem1/Oximeter/Compare To Constant8	4	1
.../Subsystem1/Oximeter/Signal Builder	4	1
.../Subsystem2/SubSystem1/Platelet_Count	3	3
.../Subsystem1/Platelet_Count/SubSystem1	4	2
.../Subsystem1/Compare To Constant6	5	1
.../Subsystem1/Compare To Constant7	5	1
.../Subsystem1/Compare To Constant8	5	1
.../Subsystem1/Platelet_Count/SubSystem2	4	2
.../Subsystem2/Compare To Constant3	5	1
.../Subsystem2/Compare To Constant4	5	1
.../Subsystem2/Compare To Constant5	5	1
.../Subsystem1/Platelet_Count/SubSystem3	4	2
.../Subsystem3/Compare To Constant1	5	1
.../Subsystem3/Compare To Constant2	5	1
.../Subsystem3/Compare To Constant9	5	1
.../Subsystem2/SubSystem1/SubSystem	3	3
.../Subsystem1/SubSystem/Diastol_Elevated1	4	2
.../Subsystem/Diastol_Elevated1/121+Compare	5	1
.../Subsystem/Diastol_Elevated1/129-Compare	5	1
.../Subsystem1/SubSystem/Diastol_Ht3	4	2
.../Subsystem/Diastol_Ht3/130+Compare	5	1
.../Subsystem/Diastol_Ht3/139-Compare	5	1
.../Subsystem1/SubSystem/Diastol_Ht4	4	2
.../Subsystem/Diastol_Ht4/140+Compare	5	1
.../Subsystem/Diastol_Ht4/159-Compare	5	1
.../Subsystem1/SubSystem/Diastol_Htcrisis1	4	2
.../Subsystem/Diastol_Htcrisis1/180+Compare	5	1
.../Subsystem/Diastol_Htcrisis1/260-Compare	5	1
.../Subsystem1/SubSystem/Diastol_Low1	4	2
.../Subsystem/Diastol_Low1/100-Compare	5	1
.../Subsystem/Diastol_Low1/90+compare	5	1
.../Subsystem1/SubSystem/Diastol_Normal1	4	2
.../Subsystem/Diastol_Normal1/120Compare	5	1
.../Subsystem1/SubSystem/Systol_Elevated	4	2
.../Subsystem/Systol_Elevated/121+Compare	5	1
.../Subsystem/Systol_Elevated/129-Compare	5	1
.../Subsystem1/SubSystem/Systol_Ht1	4	2
.../Subsystem/Systol_Ht1/130+Compare	5	1
.../Subsystem/Systol_Ht1/139-Compare	5	1
.../Subsystem1/SubSystem/Systol_Ht2	4	2
.../Subsystem/Systol_Ht2/140+Compare	5	1
.../Subsystem/Systol_Ht2/159-Compare	5	1
.../Subsystem1/SubSystem/Systol_Htcrisis	4	2
.../Subsystem/Systol_Htcrisis/180+Compare	5	1
.../Subsystem/Systol_Htcrisis/260-Compare	5	1
.../Subsystem1/SubSystem/Systol_Low	4	2
.../Subsystem/Systol_Low/100-Compare	5	1
.../Subsystem/Systol_Low/90+compare	5	1
.../Subsystem1/SubSystem/Systol_Normal	4	2
.../Subsystem/Systol_Normal/120Compare	5	1
.../Subsystem2/SubSystem1/Thyroid_Check	3	2
.../Thyroid_Check/Compare To Normal	4	1
.../Compare To low thyroid symptomatic	4	1
.../Compare To low thyroid symptomatic	4	1
.../Compare To subclinical low thyroid	4	1
.../Compare To subclinical overactive thyroid	4	1
.../Subsystem2/SubSystem1/Urine_Analysis	3	2
.../Urine_Analysis/Compare To Constant	4	1
.../Urine_Analysis/Compare To Constant1	4	1
.../Urine_Analysis/Compare To Constant2	4	1
.../Urine_Analysis/Compare To Constant3	4	1
.../Urine_Analysis/Compare To Constant4	4	1
.../Urine_Analysis/Compare To Constant5	4	1
.../Urine_Analysis/Compare To Constant6	4	1

[^ Less](#)**⚠ Check for unconnected objects**

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

Warning

The following lines, input ports, or output ports are not properly connected in system: Integrated_Model

- [Integrated Model/Subsystem2](#)
- [Integrated Model/Subsystem2/Subsystem1](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated Model/Subsystem2/Subsystem1/Urine_Analysis/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Urine_Analysis/Out1](#)
- [Integrated Model/Subsystem2/Subsystem1/Glucometer/Out1](#)
- [Integrated Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/In1](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/In2](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Out1](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Out2](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

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Recommended Action

Connect the blocks specified in the list

☒ 2.27.1 High-Integrity Systems ⚡0 ✘0 ▲29 ✕0 ✓34 📄33

☒ 2.27.1.1 Simulink ⚡0 ✘0 ▲2 ✕0 ✓10 📄24

☒ Check usage of Abs blocks

Not Run

☒ Check usage of remainder and reciprocal operations

Not Run

☒ Check usage of square root operations

Not Run

☒ Check usage of log and log10 operations

Not Run

✓ 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

✓ Check usage of For and While Iterator subsystems

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

Passed

No sample time-dependent blocks in For or While Iterator subsystems.

☒ Check usage of For Iterator blocks

Not Run

☒ Check usage of If blocks and If Action Subsystem blocks

Not Run

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

Not Run

☒ Check usage of conditionally executed subsystems

Not Run

☒ Check usage of Merge blocks

Not Run

Check relational comparisons on floating-point signals

Not Run

Check usage of Relational Operator blocks

Not Run

Check usage of Logical Operator blocks

Not Run

Check usage of bitwise operations

Not Run

⚠ 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.

Warning

The following blocks are not recommended for C/C++ production code generation:

- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal Builder](#)

Recommended Action

Although Embedded Coder supports these blocks, they are not recommended for C/C++ production code deployment.

✓ Check for inconsistent vector indexing methods

Identify inconsistent usage of vector indexing methods across the model or subsystem.

Passed

No blocks found using inconsistent indexing modes.

§ Check data types for blocks with index signals

Not Run

✓ Check usage of variant blocks

Check variant block settings that might result in code that doesn't trace back to requirements.

Passed

No variant blocks have "VariantActivationTime" set to 'code compile'.

✓ 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

No lookup table blocks found to not generate out-of-range checking code.

§ Check usage of Signal Routing blocks

Not Run

✓ Check for root Imports with missing properties

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

Passed

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

§ Check for root Imports with missing range definitions

Not Run

§ Check for root Outports with missing range definitions

Not Run

§ Check usage of Reciprocal Sqrt blocks

Not Run

Check usage of Assignment blocks

Not Run

Check 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

Not Run

Check data type of loop control variables

Not Run

Check for divide-by-zero calculations

Not Run

Check for parameter tunability ignored for referenced models

Check for models parameter tunability information specified using Model Parameter Configuration dialog boxes.

Passed

No parameters found that lose the tunability defined in the referenced models.

Check usage of bit-shift operations

Not Run

Check safety-related diagnostic settings for variants

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Variant condition mismatch at signal source and destination (VariantConditionMismatch)	none	error

Recommended Action

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

Check for disabled and parameterized library links

Identify disabled and parameterized library links in the model.

Passed

No blocks found that have disabled or parameterized library links.

Check for unreachable and dead code

Not Run

2.27.1.2 Stateflow 0 0 1 0 7 4

Check state machine type of Stateflow charts

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 recursions

Not Run

⚠ Check Stateflow debugging options

Identify whether Stateflow debugging options are set appropriately.

Warning

The following Stateflow debugging options are not set appropriately:

Parameter	Current Value	Recommended Values
Wrap on overflow.(IntegerOverflowMsg)	warning	error
Simulation range checking.(SignalRangeChecking)	none	error

Recommended Action

Change the Stateflow debugging options to the recommended value.

✓ 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

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

Not Run

✓ 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

✓ Check scoping of Stateflow data objects

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

Passed

All Stateflow data objects are properly scoped.

✓ Check Stateflow charts for uniquely defined data objects

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

Passed

No Stateflow data identifiers found to be defined in multiple scopes.

█ Check assignment operations in Stateflow charts

Not Run

█ Check Stateflow charts for unary operators

Not Run

✓ Check 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 Function interfaces with inherited complexity or data type properties found.

✓ Check MATLAB Function metrics

Identify MATLAB Functions that violate code and complexity metrics.

Passed

No MATLAB Function blocks found that violate code and complexity metrics.

✓ Check MATLAB Code Analyzer messages

Check MATLAB functions for %#codegen directive, MATLAB Code Analyzer messages, and justification message IDs.

Passed

No MATLAB Function blocks found with Code Analyzer messages, missing %#codegen directive or inappropriate usage of justification message IDs.

✓ 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

Not Run

❑ Check usage of logical operators and functions in MATLAB Function blocks

Not Run

❑ Check type and size of condition expressions

Not Run

✓ Check MATLAB functions not supported for code generation

Identify MATLAB functions that are not supported for code generation.

Passed

All identified MATLAB functions are supported for code generation.

❑ Metrics for generated code complexity

Not Run

❑ 2.27.1.4 Configuration

0 0 0 24 0 8 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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect read before write (ReadBeforeWriteMsg)	UseLocalSettings	EnableAllAsError

Warning	Detect write after read (WriteAfterReadMsg)	UseLocalSettings	EnableAllAsError
Warning	Detect write after write (WriteAfterWriteMsg)	UseLocalSettings	EnableAllAsError
Warning	Duplicate data store names (UniqueDataStoreMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for saving

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Block diagram contains disabled library links (SaveWithDisabledLinksMsg)	warning	error
Warning	Block diagram contains parameterized library links (SaveWithParameterizedLinksMsg)	warning	error

Recommended Action

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

✓ 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.

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	Show eliminated blocks (ShowEliminatedStatement)	off	on	GenerateComments
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	Verbose comments for 'Model default' storage class (ForceParamTrailComments)	off	on	GenerateComments
Warning	ReqInCode	Prerequisite constraint not met.	on	SystemTargetFile, GenerateComments

Recommended Action

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

⚠ Check safety-related code generation interface settings

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

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	Support non-finite numbers (SupportNonFinite)	on	off	
Warning	SupportAbsoluteTime	Prerequisite constraint not met.	off	SystemTargetFile
Warning	SupportContinuousTime	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportNonInlinedSFcn	Prerequisite constraint not met.	off	SystemTargetFile

Warning	IncludeMdlTerminateFcn	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	SuppressErrorStatus	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
Warning	MAT-file logging_(MatFileLogging)	on	off	

Recommended Action

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

✓ Check safety-related solver settings for simulation time

Identify if the model Start time is set to 0 and Stop time is less than the Application Life Span.

Passed

No issues found with solver settings for simulation time.

⚠ Check safety-related solver settings for solver options

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

Warning

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

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

Recommended Action

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

✓ 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.

⚠ Check safety-related diagnostic settings for solvers

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Algebraic loop (AlgebraicLoopMsg)	warning	error
Warning	Minimize algebraic loop (ArtificialAlgebraicLoopMsg)	warning	error
Warning	Block priority violation (BlockPriorityViolationMsg)	warning	error
Warning	Automatic solver parameter selection (SolverPrmCheckMsg)	none	error
Warning	State name clash (StateNameClashWarn)	none	warning

Recommended Action

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

⚠ Check safety-related diagnostic settings for sample time

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Source block specifies -1 sample time (InheritedTslnSrcMsg)	warning	error
Warning	Enforce sample times specified by Signal Specification blocks (SigSpecEnsureSampleTimeMsg)	warning	error
Warning	Single task data transfer (SingleTaskRateTransMsg)	none	error
Warning	Tasks with equal priority (TasksWithSamePriorityMsg)	warning	error
Warning	Unspecified inheritability of sample time (UnknownTslnhSupMsg)	warning	error

Recommended Action

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

✓ 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

⚠ Check safety-related block reduction optimization settings

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

Warning

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

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

Recommended Action

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

⚠ 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.

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	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Maximum, Standards	SystemTargetFile
Warning	PreserveExpressionOrder	<i>Prerequisite constraint not met.</i>	on	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

⚠ Check safety-related optimization settings for application lifespan

Check optimization settings in the model configuration that apply to application lifespan and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Application lifespan (days).(LifeSpan)	auto	inf

Recommended Action

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

⚠ Check safety-related code generation identifier settings

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

Warning

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

Status	Parameter	Current Value	Recommended Values	Not Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target		
Warning	MangleLength	<i>Prerequisite constraint not met.</i>		1, 2, 3	SystemTargetFile

Recommended Action

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

⚠ Check safety-related optimization settings for data initialization

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

Warning

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

Status	Parameter	Current Value	Recommended	Prerequisites

		Values	
		Non-ERT based target	ERT based target
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target
Warning	ZeroExternalMemoryAtStartup*	Prerequisite constraint not met.	on
Warning	ZeroInternalMemoryAtStartup*	Prerequisite constraint not met.	on
			SystemTargetFile, CodeInterfacePackaging
			SystemTargetFile, CodeInterfacePackaging

Recommended Action

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

* 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 apply to data type conversions and might impact safety.

Warning

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

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

Recommended Action

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

⚠ Check safety-related optimization settings for division arithmetic exceptions

Check optimization settings in the model configuration that apply to division arithmetic exceptions and might impact safety.

Warning

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

Status	Parameter	Current Value	Recommended Values	Prerequisites
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	NoFixptDivByZeroProtection	Prerequisite constraint not met.	off	SystemTargetFile

Recommended Action

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

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

Check optimization settings in the model configuration that apply to specified minimum and maximum values and might impact safety.

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	UseSpecifiedMinMax	Prerequisite constraint not met.	off	SystemTargetFile
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	

Recommended Action

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

✓ Check safety-related settings for 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.

⚠ Check safety-related diagnostic settings for compatibility

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	S-function upgrades needed (SFcnCompatibilityMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for parameters

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Detect underflow (ParameterUnderflowMsg)	none	error
Warning	Detect precision loss (ParameterPrecisionLossMsg)	warning	error
Warning	Detect loss of tunability (ParameterTunabilityLossMsg)	warning	error

Recommended Action

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

✓ 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 diagnostic settings in the model configuration that affect model initialization and might impact safety.

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.

Warning

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

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

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Signal label mismatch (SignalLabelMismatchMsg)	none	error
Warning	Unconnected block input ports (UnconnectedInputMsg)	none	error
Warning	Unconnected block output ports (UnconnectedOutputMsg)	none	error
Warning	Unconnected line (UnconnectedLineMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for bus connectivity

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unspecified bus object at root Outport block (RootOutportRequireBusObject)	warning	error
Warning	Element name mismatch (BusObjectLabelMismatch)	warning	error
Warning	Bus signal treated as vector (StrictBusMsg)	ErrorLevel1	ErrorOnBusTreatedAsVector
Warning	Non-bus signals treated as bus signals (NonBusSignalsTreatedAsBus)	none	error

Recommended Action

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

✓ 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	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.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Unnecessary type conversions (UnnecessaryDatatypeConvMsg)	none	warning
Warning	Vector/matrix block input conversion (VectorMatrixConversionMsg)	none	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for model referencing

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Port and parameter mismatch (ModelReferenceIOMismatchMessage)	none	error
Warning	Invalid root Inport/Outport block connection (ModelReferenceOMsg)	none	error
Warning	Unsupported data logging (ModelReferenceDataLoggingMessage)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for Stateflow

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Invalid input data access in chart initialization (SFInvalidInputDataAccessInChartInitDiag)	warning	error
Warning	Transition outside natural parent (SFTransitionOutsideNaturalParentDiag)	warning	error
Warning	Unreachable execution path (SFUnreachableExecutionPathDiag)	warning	error

Warning	Undirected event broadcasts (SFUndirectedBroadcastEventsDiag)	warning	error
Warning	Transition action specified before condition action (SFTransitionActionBeforeConditionDiag)	warning	error
Warning	Absolute time temporal value shorter than sampling period (SFTemporalDelaySmallerThanSampleTimeDiag)	warning	error
Warning	Self-transition on leaf state (SFSelfTransitionDiag)	warning	error
Warning	'Execute-at-initialization' disabled in presence of input events (SFEExecutionAtInitializationDiag)	warning	error

Recommended Action

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

⚠ Check safety-related diagnostic settings for signal data

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

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Underspecified data types (UnderSpecifiedDataTypeMsg)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Simulation range checking (SignalRangeChecking)	none	error

Recommended Action

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

☒ **2.27.1.5 Naming** -0 ☒0 ⚠0 ☒0 ✓1 ☒1
✓ 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**

Not Run

☒ **2.27.1.6 Requirements** -0 ☒0 ⚠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.

Warning

The following model elements do not link to a requirements document:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcritis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcritis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)

- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Subsystem](#)

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Recommended Action

For each model element in the list, in the Model Editor, right-click the model element, select Requirements, and specify a requirement. Check the [Traceability Matrix](#) for viewing requirements and their links to blocks in Simulink model in a compact format.

[2.27.1.7 Code](#) 0 0 1 0

✓ Check for blocks not recommended for MISRA C:2012

Passed

⚠ 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	Shared code placement (UtilityFuncGeneration)	Auto	Shared location	
Warning	Generate shared constants (GenerateSharedConstants)	<i>Prerequisite constraint not met.</i>	off	UtilityFuncGeneration
D - Warning	System target file (SystemTargetFile)	Non-ERT based target	ERT based target	
Warning	SupportContinuousTime	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	SupportNonInlinedSFcn	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	MAT-file logging (MatFileLogging)	on	off	
Warning	ParenthesesLevel	<i>Prerequisite constraint not met.</i>	Standards, Maximum	SystemTargetFile
Warning	CastingMode	<i>Prerequisite constraint not met.</i>	Standards	SystemTargetFile
Warning	InternalIdentifier	<i>Prerequisite constraint not met.</i>	Shortened	SystemTargetFile
Warning	Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)	off	on, UseDivisionForReciprocalsOfIntegersOnly	
Warning	EnableSignedLeftShifts	<i>Prerequisite constraint not met.</i>	off	SystemTargetFile
Warning	EnableSignedRightShifts	<i>Prerequisite constraint not met.</i>	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	<i>Prerequisite constraint not met.</i>	on	GenerateComments, SystemTargetFile
Warning	Leverage target hardware instruction set extensions (InstructionSetExtensions)	SSE2	None	

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Recommended Action

Modify the configuration parameters listed above to the recommended values.

[2.28 Model Metrics](#) 0 0 9 1

[2.28.1 Count Metrics](#) 0 0 7 0

✓ Simulink block metric

Display number of blocks in the model or subsystem.

Passed

Component	Blocks
Integrated_Model/Subsystem2/Subsystem1	34
.../Subsystem2/Subsystem1/Oximeter	33
.../Subsystem2/Subsystem1/Subsystem	30
.../Subsystem2/Subsystem1/Urine_Analysis	26
Integrated_Model/Subsystem2	23
.../Subsystem1/Body_Temperature_Check	22
.../Subsystem1/Condition_Of_Kidney	19
.../Subsystem1/Blood_Classification	19
.../Subsystem2/Subsystem1/Thyroid_Check	18
.../Subsystem1/Glucometer/Subsystem	15
.../Subsystem1/Platelet_Count/Subsystem1	14
.../Subsystem1/Subsystem/Diastol_Elevated1	13
.../Subsystem1/Subsystem/Diastol_Ht3	13
.../Subsystem1/Subsystem/Diastol_Ht4	13
.../Subsystem1/Subsystem/Diastol_Htcrisis1	13
.../Subsystem1/Subsystem/Diastol_Low1	13
.../Subsystem1/Subsystem/Systol_Elevated	13
.../Subsystem1/Subsystem/Systol_Ht1	13
.../Subsystem1/Subsystem/Systol_Ht2	13
.../Subsystem1/Subsystem/Systol_Htcrisis	13
.../Subsystem1/Subsystem/Systol_Low	13
.../Subsystem1/Blood_Platelet_Count	12
.../Subsystem1/Platelet_Count/Subsystem2	12
.../Subsystem1/Platelet_Count/Subsystem3	12
.../Subsystem1/Subsystem/Diastol_Normal1	8
.../Subsystem1/Subsystem/Systol_Normal	8
.../Subsystem2/Subsystem1/Platelet_Count	7
.../Celsius_to_Fahrenheit	5
.../Subsystem2/Subsystem1/Glucometer	5
Integrated_Model	1

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✓ Subsystem metric

Display number of Subsystems in the model or subsystem.

Passed

Component	Subsystems
.../Subsystem2/Subsystem1/Subsystem	12
.../Subsystem2/Subsystem1/Oximeter	10
Integrated_Model/Subsystem2/Subsystem1	10
.../Subsystem1/Blood_Classification	8
.../Subsystem2/Subsystem1/Urine_Analysis	7
.../Subsystem1/Condition_Of_Kidney	5
.../Subsystem2/Subsystem1/Thyroid_Check	5
.../Subsystem1/Glucometer/Subsystem	4
.../Subsystem1/Blood_Platelet_Count	3
.../Subsystem1/Body_Temperature_Check	3
.../Subsystem1/Platelet_Count/Subsystem1	3
.../Subsystem1/Platelet_Count/Subsystem2	3
.../Subsystem1/Platelet_Count/Subsystem3	3
.../Subsystem2/Subsystem1/Platelet_Count	3
.../Subsystem1/Subsystem/Diastol_Elevated1	2
.../Subsystem1/Subsystem/Diastol_Ht3	2
.../Subsystem1/Subsystem/Diastol_Ht4	2
.../Subsystem1/Subsystem/Diastol_Htcrisis1	2
.../Subsystem1/Subsystem/Diastol_Low1	2
.../Subsystem1/Subsystem/Systol_Elevated	2
.../Subsystem1/Subsystem/Systol_Ht1	2
.../Subsystem1/Subsystem/Systol_Ht2	2
.../Subsystem1/Subsystem/Systol_Htcrisis	2
.../Subsystem1/Subsystem/Systol_Low	2
Integrated_Model	1
Integrated_Model/Subsystem2	1
.../Subsystem2/Subsystem1/Glucometer	1
.../Subsystem1/Subsystem/Diastol_Normal1	1
.../Subsystem1/Subsystem/Systol_Normal	1
.../Celsius_to_Fahrenheit	0

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Library link metric

Display number of library links in the model or subsystem.

Passed

Component	Library Links
..../Subsystem2/Subsystem1/Oximeter	9
..../Subsystem1/Blood_Classification	8
..../Subsystem2/Subsystem1/Urine_Analysis	7
..../Subsystem1/Condition_Of_Kidney	5
..../Subsystem2/Subsystem1/Thyroid_Check	5
..../Subsystem1/Glucometer/Subsystem	4
..../Subsystem1/Blood_Platelet_Count	3
..../Subsystem1/Body_Temperature_Check	3
..../Subsystem1/Platelet_Count/Subsystem1	3
..../Subsystem1/Platelet_Count/Subsystem2	3
..../Subsystem1/Platelet_Count/Subsystem3	3
..../Subsystem1/Subsystem/Diastol_Elevated1	2
..../Subsystem1/Subsystem/Diastol_Ht3	2
..../Subsystem1/Subsystem/Diastol_Ht4	2
..../Subsystem1/Subsystem/Diastol_Htcrisis1	2
..../Subsystem1/Subsystem/Diastol_Low1	2
..../Subsystem1/Subsystem/Systol_Elevated	2
..../Subsystem1/Subsystem/Systol_Ht1	2
..../Subsystem1/Subsystem/Systol_Ht2	2
..../Subsystem1/Subsystem/Systol_Htcrisis	2
..../Subsystem1/Subsystem/Systol_Low	2
..../Subsystem1/Subsystem/Diastol_Normal1	1
..../Subsystem1/Subsystem/Systol_Normal	1
Integrated_Model	0
Integrated_Model/Subsystem2	0
..../Celsius_to_Fahrenheit	0
Integrated_Model/Subsystem2/Subsystem1	0
..../Subsystem2/Subsystem1/Platelet_Count	0
..../Subsystem2/Subsystem1/Glucometer	0
..../Subsystem2/Subsystem1/Subsystem	0

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Effective lines of MATLAB code metric

Display number of effective lines of MATLAB code.

No metric data available. Nothing to report for this metric.

Passed

Stateflow chart objects metric

Display number of Stateflow objects in each chart.

No metric data available. Nothing to report for this metric.

Passed

Lines of code for Stateflow blocks metric

Display number of code lines for Stateflow blocks.

No metric data available. Nothing to report for this metric.

Passed

Subsystem depth metric

Display depth of subsystems in the model or subsystem.

Passed

Component	Subsystem Depth
..../Celsius_to_Fahrenheit	4
..../Subsystem1/Platelet_Count/Subsystem1	4
..../Subsystem1/Platelet_Count/Subsystem2	4
..../Subsystem1/Platelet_Count/Subsystem3	4
..../Subsystem1/Glucometer/Subsystem	4
..../Subsystem1/Subsystem/Diastol_Elevated1	4
..../Subsystem1/Subsystem/Diastol_Ht3	4
..../Subsystem1/Subsystem/Diastol_Ht4	4

.../Subsystem1/Subsystem/Diastol_Htcrisis1	4
.../Subsystem1/Subsystem/Diastol_Low1	4
.../Subsystem1/Subsystem/Diastol_Normal1	4
.../Subsystem1/Subsystem/Systol_Elevated	4
.../Subsystem1/Subsystem/Systol_Ht1	4
.../Subsystem1/Subsystem/Systol_Ht2	4
.../Subsystem1/Subsystem/Systol_Htcrisis	4
.../Subsystem1/Subsystem/Systol_Low	4
.../Subsystem1/Subsystem/Systol_Normal	4
.../Subsystem1/Condition_Of_Kidney	3
.../Subsystem2/Subsystem1/Urine_Analysis	3
.../Subsystem1/Blood_Platelet_Count	3
.../Subsystem2/Subsystem1/Thyroid_Check	3
.../Subsystem2/Subsystem1/Oximeter	3
.../Subsystem1/Blood_Classification	3
.../Subsystem1/Body_Temperature_Check	3
.../Subsystem2/Subsystem1/Platelet_Count	3
.../Subsystem2/Subsystem1/Glucometer	3
.../Subsystem2/Subsystem1/Subsystem	3
Integrated_Model/Subsystem2/Subsystem1	2
Integrated_Model/Subsystem2	1
Integrated_Model	0

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☒ 2.28.2 Complexity Metrics -0 X0 A0 M0 G0 D1

☒ Cyclomatic complexity metric

Not Run

☒ 2.28.3 Readability Metrics -0 X0 A0 M0 G2 D0

✓ Nondescriptive block name metric

Display non-descriptive names of Input, Outport and Subsystem blocks.

Passed

Component	Nondescriptive Names
Integrated_Model/Subsystem2/Subsystem1	23
Integrated_Model/Subsystem2	21
.../Subsystem2/Subsystem1/Platelet_Count	5
.../Subsystem1/Body_Temperature_Check	4
.../Subsystem2/Subsystem1/Subsystem	4
.../Subsystem1/Platelet_Count/Subsystem1	3
.../Subsystem2/Subsystem1/Glucometer	3
.../Subsystem1/Condition_Of_Kidney	2
.../Subsystem2/Subsystem1/Urine_Analysis	2
.../Subsystem2/Subsystem1/Oximeter	2
.../Subsystem1/Blood_Classification	2
.../Subsystem1/Glucometer/Subsystem	2
Integrated_Model	1
.../Subsystem1/Blood_Platelet_Count	1
.../Subsystem2/Subsystem1/Thyroid_Check	1
.../Subsystem1/Platelet_Count/Subsystem2	1
.../Subsystem1/Platelet_Count/Subsystem3	1
.../Subsystem1/Subsystem/Diastol_Elevated1	1
.../Subsystem1/Subsystem/Diastol_Ht3	1
.../Subsystem1/Subsystem/Diastol_Ht4	1
.../Subsystem1/Subsystem/Diastol_Htcrisis1	1
.../Subsystem1/Subsystem/Diastol_Low1	1
.../Subsystem1/Subsystem/Diastol_Normal1	1
.../Subsystem1/Subsystem/Systol_Elevated	1
.../Subsystem1/Subsystem/Systol_Ht1	1
.../Subsystem1/Subsystem/Systol_Ht2	1
.../Subsystem1/Subsystem/Systol_Htcrisis	1
.../Subsystem1/Subsystem/Systol_Low	1
.../Subsystem1/Subsystem/Systol_Normal	1
.../Celsius to Fahrenheit	0

[^ Less](#)

✓ Data and structure layer separation metric

Display data and structure layer separation, defined by MAB modeling guideline db_0143.

Passed

Component	Non-conforming Blocks
..../Subsystem2/Subsystem1/Subsystem	14
..../Subsystem2/Subsystem1/Platelet_Count	2
..../Subsystem2/Subsystem1/Glucometer	2
Integrated_Model	0
..../Subsystem1/Condition_Of_Kidney	0
..../Subsystem2/Subsystem1/Urine_Analysis	0
..../Subsystem1/Blood_Platelet_Count	0
..../Subsystem2/Subsystem1/Thyroid_Check	0
..../Subsystem2/Subsystem1/Oximeter	0
Integrated_Model/Subsystem2	0
..../Subsystem1/Blood_Classification	0
..../Subsystem1/Body_Temperature_Check	0
..../Celsius_to_Fahrenheit	0
Integrated_Model/Subsystem2/Subsystem1	0
..../Subsystem1/Platelet_Count/Subsystem1	0
..../Subsystem1/Platelet_Count/Subsystem2	0
..../Subsystem1/Platelet_Count/Subsystem3	0
..../Subsystem1/Glucometer/Subsystem	0
..../Subsystem1/Subsystem/Diastol_Elevated1	0
..../Subsystem1/Subsystem/Diastol_Ht3	0
..../Subsystem1/Subsystem/Diastol_Ht4	0
..../Subsystem1/Subsystem/Diastol_Htcrisis1	0
..../Subsystem1/Subsystem/Diastol_Low1	0
..../Subsystem1/Subsystem/Diastol_Normal1	0
..../Subsystem1/Subsystem/Systol_Elevated	0
..../Subsystem1/Subsystem/Systol_Ht1	0
..../Subsystem1/Subsystem/Systol_Ht2	0
..../Subsystem1/Subsystem/Systol_Htcrisis	0
..../Subsystem1/Subsystem/Systol_Low	0
..../Subsystem1/Subsystem/Systol_Normal	0

[^ Less](#)**☒ 2.29 Modeling Standards for MAB** -0 ✖0 ⚠24 ☒0 ✓93 █26**☒ 2.29.1 Naming Conventions** -0 ✖0 ⚠4 ☒0 ✓13 █3**☒ 2.29.1.1 General** -0 ✖0 ⚠1 ☒0 ✓3 █0**⚠ Check file names****Characters allowed for file names****Warning**

The following files have invalid names:

- C:\Users\hp\Desktop\L&T Work\MBD\AMBD_GlucoMeter_V2.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\AMBD_GlucoMeter_V3.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\AMBD_GlucoMeter_Yash.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\Integrated_Model.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\ThyroidCheckupV1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\bloodver1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\bp_check_ver1_1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\bpcheck_ver1_1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\project.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\temperature.slx.autosave

Recommended Action

Consider having only alphanumeric characters and underscores in file name.

Single reserved MATLAB word**Warning**

The following files have Reserved MATLAB words as the file name:

- C:\Users\hp\Desktop\L&T Work\MBD\project.slx

Recommended Action

Consider not having Reserved MATLAB word as the file name.

Identical file names on path

Warning

The following files have names which are identical to files present in MATLAB path:

- C:\Users\hp\Desktop\L&T Work\MBD\project.slx

Recommended Action

Consider having unique file names.

✓ Check folder names

Check the folder name to ensure that the name complies with the recommended guidelines.

Passed

All folders have correct names.

✓ Check length of model file name

Check length of model file name

Passed

Model name is valid.

✓ Check length of folder name at every level of model path

The model file name is: [Integrated_Model](#)

Passed

Folder names are valid.

2.29.1.2 Content 0 0 3 10 3

✓ Check subsystem names**Passed****⚠ Check port block names**

Characters allowed for port block names

Warning

The following port blocks have invalid names:

- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Input values](#)
- [....SubSystem2/SubSystem1/SubSystem/Diastol_Htcrisis1/Input value](#)
- [....SubSystem2/SubSystem1/SubSystem/Diastol_Normal1/Input value](#)
- [....SubSystem2/SubSystem1/SubSystem/Diastol_Elevated1/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Input value](#)
- [....SubSystem2/SubSystem1/SubSystem/Systol_Htcrisis/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Input value](#)
- [....SubSystem2/SubSystem1/SubSystem/Systol_Elevated/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Input values](#)

Recommended Action

Consider having only alphanumeric characters and underscores in port block name.

⚠ Check character usage in block names

Characters allowed for block names

Warning

The following blocks have invalid names:

- [....SubSystem2/SubSystem1/Thyroid_Check/low thyroid symptomatic](#)
- [....SubSystem2/SubSystem1/Thyroid_Check/low thyroid symptomatic](#)
- [....SubSystem2/SubSystem1/Thyroid_Check/subclinical low thyroid](#)
- [....SubSystem2/SubSystem1/Thyroid_Check/subclinical overactive thyroid](#)

Recommended Action

Consider having only alphanumeric characters and underscores in block name.

✓ Check length of subsystem names**Passed****✓ Check length of block names****Passed**

Check length of Import and Outport names

Passed

Check character usage in signal names and bus names

Characters allowed for signal names and bus names

Warning

The following signals or buses have invalid names:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_grp_A+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_0-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_A-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_O+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_B-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_AB+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_AB-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_B](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Normal Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Mild Loss](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Severe Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Moderate Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Failure Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 93](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 95](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 94](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 96](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 97](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 98](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 99](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input less than 93](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input more than 99](#)

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Recommended Action

Consider having only alphanumeric characters and underscores in signal names and bus names.

Check character usage in parameter names

Not Run

Check length of signal and bus names

Check length of signal and bus names

Passed

All signal and bus names are valid.

Check length of parameter names

Not Run

Check character usage in Stateflow data names

Identify Stateflow data names with invalid characters.

Passed

No invalid characters are used in Stateflow data names.

Check length of Stateflow data name

Check if the length of Stateflow data names are within limit.

Passed

All Stateflow data names are valid.

Check duplication of Simulink Data names

Simulink Data names should be unique across base workspace, model workspace and data dictionary.

Passed

All Simulink Data names are unique.

Check unused data in Simulink Model

Not Run

Check for unused data in Stateflow Charts

Checks if the model parameter 'Unused data, events, messages and functions' is not set to 'none'.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Unused data, events, messages and functions (SFUnusedDataAndEventsDiag)	warning	error, warning

✓ Check usage of restricted variable names

Identify usage of reserved keywords in MATLAB Function blocks.

Passed

No variable names conflict with reserved keywords

☒ 2.29.2 Simulink ⚡0 ✘0 ⚠20 ✕0 ✓28 📈15

☒ 2.29.2.1 Configuration Parameters ⚡0 ✘0 ⚠2 ✕0 ✓2 📈0

✓ Check Implement logic signals as Boolean data (vs. double)

Identify whether **Implement logic signals as Boolean data (vs. double)** is selected.

Passed

Implement logic signals as Boolean data (vs. double) is selected.

✓ Check Signed Integer Division Rounding mode

jc_0642: Integer rounding mode setting

Identifies blocks with block parameter 'Integer Rounding Mode' set to 'Simplest' when the configuration parameter 'Signed integer division rounds to' is set to 'Undefined'.

Passed

Configuration parameter 'Signed integer division rounds to' is not set to 'Undefined'.

⚠ Check diagnostic settings for incorrect calculation results

Identify data validity diagnostic settings which detect incorrect calculation results.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error

Recommended Action

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

⚠ Check model diagnostic parameters

Identify diagnostic parameters that are set to none.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error, warning
Warning	Duplicate data store names (UniqueDataStoreMsg)	none	error, warning
Warning	Unconnected block input ports (UnconnectedInputMsg)	none	error, warning
Warning	Unconnected block output ports (UnconnectedOutputMsg)	none	error, warning
Warning	Unconnected line (UnconnectedLineMsg)	none	error, warning

Recommended Action

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

☒ 2.29.2.2 Diagram Appearance ⚡0 ✘0 ⚠9 ✕0 ✓7 📈1

⚠ Check for Simulink diagrams using nonstandard display attributes

Identify nonstandard display attributes in Simulink diagrams.

Check format settings

Identify incorrect model-level format options.

Warning

The following format display options are incorrect.

Display Attribute	Recommended Value	Actual Value
Debug > Information Overlays > Nonscalar Signals	on	off
Modeling > Environment > Model Browser	off	on
Debug > Information Overlays > Show All Links	none	disabled

Recommended Action

Set the format options to the recommended value.

Check block colors

Identify blocks using nonstandard colors.

Passed

All blocks use standard colors.

Check canvas colors

Identify canvases that are not white.

Passed

All diagrams use a white canvas.

Check diagram zoom

Identify diagrams that do not have zoom factor set to 100 %.

Note: Zoom factors can differ for each instance of a model diagram opened in Simulink Editor

Warning

The following diagrams do not have zoom factor set to 100 percent:

- [Integrated_Model](#)
- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)

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Recommended Action

For each listed diagram, select **Modeling > Environment > Zoom > Normal View (100%)**.

⚠ Check Model font settings

Check font size in Simulink block and signal names

Warning

The font size of the following Simulink block or signal names are different from input parameters:

- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Subsystem](#)

Recommended Action

Consider modifying font size of block and signal names as per input parameters.

✓ Check whether block names appear below blocks

Passed

⚠ Check the display attributes of block names

Identify whether to display block names.

Check for non-descriptive displayed block names

Identify block names that are displayed but should be hidden due to a lack of descriptive name.

Passed

All displayed names provide descriptive information.

Check for blocks with hidden names and obvious function

Identify block names that are displayed but can be hidden due to obvious behavior.

Warning

The following block names can be hidden:

- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/121+Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/129-Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Range_Lower](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/130+Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/139-Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Range_Lower](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/140+Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/159-Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Range_Lower](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Range_Upper](#)
- [..../Subsystem1/Subsystem/Diastol_Htcrisis1/180+Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/260-Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Range_Lower](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/100-Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/90+compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Range_Lower](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/120Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Range_compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/121+Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/129-Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Range_Lower](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/130+Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/139-Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Range_Lower](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/140+Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/159-Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Range_Lower](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Range_Upper](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/180+Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/260-Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Range_Lower](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low1/100-Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low1/90+compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low1/Range_Lower](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low1/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal1/120Compare](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Normal/Range_compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Compare_To_Normal](#)
- [..../Subsystem2/Subsystem1/Thyroid_Check/Compare_To_low_thyroid_symptomatic](#)
- [..../Subsystem2/Subsystem1/Thyroid_Check/Compare_To_low_thyroid_symptomatic](#)
- [..../Subsystem2/Subsystem1/Thyroid_Check/Compare_To_subclinical_low_thyroid](#)
- [..../Subsystem1/Thyroid_Check/Compare_To_subclinical_overactive_thyroid](#)

[^ Less](#)

Recommended Action

Hide the block name by selecting (**Format > Auto Name > Hide Automatic Block Name**).

Check for missing block names

Identify block names that are hidden but should be displayed to show a descriptive name.

Warning

The following blocks have descriptive names, however, the names are hidden:

- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Lamp](#)

Recommended Action

Modify the blocks to show the block name by deselecting (**Format > Auto Name > Hide Automatic Block Name**).

⚠ Check for nondefault block attributes

Identify blocks that use and fail to display nondefault values.

Warning

The following blocks use and fail to display nondefault values:

Block	Parameter	Expected Value	Actual Value
..../Body_Temperature_Check/Switch1	Threshold	0	15

Recommended Action

For the above blocks, display the nondefault value using the Block Annotation pane of the Block Properties dialog box.

⚠ Check Model Description

Identify layers in the model having inconsistent description format.

Warning

Following layers do not have model descriptions:

- [Integrated_Model](#)
- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)

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Recommended Action

Consider adding model description for all the layers.

Identify layers in the model having inconsistent description format.

Warning

Following layers do not have consistent model description format:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)

[^ Less](#)

Recommended Action

Consider having a consistent format for the model description

Example: If description tags are 'Input:, Description:, and Output:' then format should be as following:

Input: add input information here

Description: add model description here

Output: add output information here

✓ Check if blocks are shaded in the model

Check if blocks are shaded in the model

Passed

Blocks in the model are not shaded.

⚠ Check for unconnected signal lines and blocks**Check for unconnected subsystems and basic blocks****Warning**

The following blocks in the model are not connected:

- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In1](#)

⚠ Check for mixing basic blocks and subsystems

Identify levels in the model that include basic blocks and subsystems. Each level of a model must be designed with blocks of the same level (for example, only subsystems or only basic blocks).

Warning

The following level(s) in the model include basic blocks and subsystems:

System	Block path
.../Subsystem2/Subsystem1/Glucometer	.../Subsystem1/Glucometer/Constant
.../Subsystem2/Subsystem1/Glucometer	.../Subsystem2/Subsystem1/Glucometer/Display
.../Subsystem2/Subsystem1/Platelet_Count	.../Subsystem2/Subsystem1/Platelet_Count/AND
.../Subsystem2/Subsystem1/Platelet_Count	.../Subsystem1/Platelet_Count/Display
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Constant
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem1/Subsystem/Constant1
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display1
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem1/Subsystem/Display10
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem1/Subsystem/Display11
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display2
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display3
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display4
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display5
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display6
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display7
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display8
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display9

[^ Less](#)

Recommended Action

If possible, replace blocks at the identified level of the model hierarchy with basic blocks. Move nonvirtual blocks into the identified subsystem.

✓ Check for avoiding algebraic loops between subsystems

jc_0653: Delay block layout in feedback loops

Identify delay blocks usage in feedback loops.

Passed

No delay blocks in feedback loops violate the guidelines for avoiding algebraic loops between subsystems.

✓ Check for prohibited sink blocks

Passed

[2.29.2.3 Signal](#)      

☒ Check usage of vector and bus signals

Not Run

⚠ Check definition of signal labels

Identify blocks that require labeled signals. A subset of source and destination blocks require labeled signals.

Check source block labels

Warning

The following signals have no label:

- [Integrated_Model/Subsystem2/ln1/](#)
- [Integrated_Model/Subsystem2/ln2/](#)
- [Integrated_Model/Subsystem2/ln3/](#)
- [Integrated_Model/Subsystem2/ln4/](#)
- [Integrated_Model/Subsystem2/ln5/](#)
- [Integrated_Model/Subsystem2/ln6/](#)
- [Integrated_Model/Subsystem2/u/](#)
- [Integrated_Model/Subsystem2/u1/](#)
- [Integrated_Model/Subsystem2/ln7/](#)
- [Integrated_Model/Subsystem2/ln8/](#)
- [Integrated_Model/Subsystem2/ln9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/u1/](#)

- [Integrated_Model/Subsystem2/Subsystem1/In7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/In1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/In2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/In1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/In1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/In10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Input_values/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Input_values/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/From/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/From1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/From2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant9/](#)

- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant25/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant26/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant15/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant16/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant17/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant18/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant27/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant19/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant20/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant21/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant22/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant28/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant23/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant24/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant25/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant26/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant15/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant16/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant17/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant18/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant27/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant19/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant20/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant21/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant22/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant28/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant23/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant24/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical low thyroid/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical overactive thyroid/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant8/](#)

^{▲ Less}**Recommended Action**

Add a new or propagated label to the signal line.

Identify blocks that require labeled signals. A subset of source and destination blocks require labeled signals.

Check destination block labels**Warning**

The following signals have no label:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Out2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Out12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out12/](#)
- [Integrated_Model/Subsystem2/Out1/](#)
- [Integrated_Model/Subsystem2/Out2/](#)
- [Integrated_Model/Subsystem2/Out3/](#)
- [Integrated_Model/Subsystem2/Out4/](#)
- [Integrated_Model/Subsystem2/Out5/](#)
- [Integrated_Model/Subsystem2/Out6/](#)
- [Integrated_Model/Subsystem2/Out7/](#)
- [Integrated_Model/Subsystem2/Out8/](#)
- [Integrated_Model/Subsystem2/Out9/](#)
- [Integrated_Model/Subsystem2/Out10/](#)
- [Integrated_Model/Subsystem2/Out11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/](#)

[▲] Less**Recommended Action**

Add a new or propagated label to the signal line.

⚠ Check Signal name propagation**Check Signal name propagation for subsystems****Warning**

The following subsystems do not have propagated signal labels:

- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)

- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)

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Recommended Action

Add labels and enable signal propagation by selecting 'Show propagated signal' parameter for signals.

⚠ Check position of signal labels**Check location of signal labels****Warning**

The following signals do not have labels located at the origin of the signal line:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_AB](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_O+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_A-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_grp_A+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_0-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_AB+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_B-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_B+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Mild Loss](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Moderate Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Severe Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Normal Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 94](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 99](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input more than 99](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 96](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 95](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 93](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 98](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input less than 93](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 97](#)

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Recommended Action

Consider placing the labels at the origin of the signal line.

Check overlap of signal labels**Warning**

The following signals have labels which overlap other objects:

- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Failure Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Mild Loss](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Moderate Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Severe Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Normal Condition](#)

Recommended Action

Consider placing the signal label so that it is readable.

⚠ Check signal line labels

Identify blocks that require labeled signals. A subset of source and destination blocks require labeled signals.

Check source block labels**Warning**

The following signals have no label:

- [Integrated_Model/Subsystem2/ln1/](#)
- [Integrated_Model/Subsystem2/ln2/](#)
- [Integrated_Model/Subsystem2/ln3/](#)
- [Integrated_Model/Subsystem2/ln4/](#)
- [Integrated_Model/Subsystem2/ln5/](#)
- [Integrated_Model/Subsystem2/ln6/](#)
- [Integrated_Model/Subsystem2/u/](#)
- [Integrated_Model/Subsystem2/u1/](#)
- [Integrated_Model/Subsystem2/ln7/](#)
- [Integrated_Model/Subsystem2/ln8/](#)
- [Integrated_Model/Subsystem2/ln9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/u1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/ln10/](#)

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/ln1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/ln2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/ln1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/ln1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/ln10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Input_values/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Input_values/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Input_value/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Thyroid_Check/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/From/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/From1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/From2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant7/](#)

- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant25/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant26/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant15/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant16/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant17/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant18/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant27/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant19/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant20/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant21/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant22/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant28/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant23/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant24/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant25/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant26/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant15/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant16/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant17/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant18/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant27/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant19/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant20/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant21/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant22/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant28/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant23/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant24/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Constants5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical low thyroid/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical overactive thyroid/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant8/](#)

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Recommended Action

Add a new or propagated label to the signal line.

Identify blocks that require labeled signals. A subset of source and destination blocks require labeled signals.

Check destination block labels**Warning**

The following signals have no label:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Out2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Out12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out12/](#)
- [Integrated_Model/Subsystem2/Out1/](#)
- [Integrated_Model/Subsystem2/Out2/](#)
- [Integrated_Model/Subsystem2/Out3/](#)
- [Integrated_Model/Subsystem2/Out4/](#)
- [Integrated_Model/Subsystem2/Out5/](#)
- [Integrated_Model/Subsystem2/Out6/](#)
- [Integrated_Model/Subsystem2/Out7/](#)
- [Integrated_Model/Subsystem2/Out8/](#)
- [Integrated_Model/Subsystem2/Out9/](#)
- [Integrated_Model/Subsystem2/Out10/](#)
- [Integrated_Model/Subsystem2/Out11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/](#)

^{▲ Less}**Recommended Action**

Add a new or propagated label to the signal line.

Check for propagated signal labels

Identify propagated labels on signal lines.

Passed

All inputs and outputs to the subsystems and blocks have labels and display propagated signals.

2.29.2.4 Block Consistency 0 0 1 0 3 2

Check Indexing Mode

Identify blocks and charts with inconsistent Indexing mode.

Passed

No inconsistent Indexing mode used in the model.

Check block orientation

Identify blocks which are rotated or reversed.

Passed

No blocks found with rotated or reversed orientation

Check if tunable block parameters are defined as named constants

Check if tunable block parameters are defined as named constants

Warning

The following tunable block parameters are not defined as named constants.

Block	Violations
.../Subsystem1/Blood_Classification/Constant	Value : 2
.../Blood_Platelet_Count/Constant3	Value : 2
.../Blood_Platelet_Count/Constant4	Value : 2
.../Body_Temperature_Check/Constant2	Value : 55
.../Body_Temperature_Check/Switch1	Threshold : 15
.../Body_Temperature_Check/Switch2	Threshold : 15
.../Subsystem1/Condition_Of_Kidney/Constant	Value : 41.2
.../Subsystem1/Condition_Of_Kidney/Constant2	Value : 2
.../Subsystem1/Condition_Of_Kidney/Constant3	Value : 4
.../Subsystem1/Condition_Of_Kidney/Constant4	Value : 3
.../Subsystem1/Condition_Of_Kidney/Constant5	Value : 5
.../Subsystem1/Glucometer/Constant	Value : 5.8
.../Platelet_Count/Subsystem1/Constant12	Value : 2
.../Platelet_Count/Subsystem1/Constant13	Value : 2
.../Platelet_Count/Subsystem2/Constant7	Value : 2
.../Platelet_Count/Subsystem2/Constant8	Value : 2
.../Platelet_Count/Subsystem3/Constant14	Value : 2
.../Platelet_Count/Subsystem3/Constant4	Value : 2
.../Subsystem2/Subsystem1/Subsystem/Constant	Value : 156
.../Subsystem1/Subsystem/Constant1	Value : 96
.../Subsystem/Diastol_Elevated1/Constant25	Value : 3
.../Subsystem/Diastol_Ht3/Constant26	Value : 4
.../Subsystem/Diastol_Ht4/Constant27	Value : 5
.../Subsystem/Diastol_Htcrisis1/Constant28	Value : 6
.../Subsystem/Diastol_Normal1/Constant24	Value : 2
.../Subsystem/Systol_Elevated/Constant25	Value : 3
.../Subsystem/Systol_Ht1/Constant26	Value : 4
.../Subsystem/Systol_Ht2/Constant27	Value : 5
.../Subsystem/Systol_Htcrisis/Constant28	Value : 6
.../Subsystem/Systol_Normal/Constant24	Value : 2
.../Subsystem1/Thyroid_Check/Constant5	Value : 4
.../Subsystem1/Thyroid_Check/Normal	Value : 2
.../Thyroid_Check/low_thyroid_symptomatic	Value : 4
.../Thyroid_Check/subclinical_low_thyroid	Value : 3
.../Subsystem1/Urine_Analysis/Constant1	Value : 7
.../Subsystem1/Urine_Analysis/Constant2	Value : 2
.../Subsystem1/Urine_Analysis/Constant3	Value : 3
.../Subsystem1/Urine_Analysis/Constant4	Value : 4
.../Subsystem1/Urine_Analysis/Constant5	Value : 5
.../Subsystem1/Urine_Analysis/Constant6	Value : 6
.../Subsystem1/Urine_Analysis/Constant7	Value : 7
.../Subsystem1/Urine_Analysis/Constant8	Value : 7

[^ Less](#)

Recommended Action

Consider changing tunable block parameter literal values to named constants.

✓ Check for sample time setting

Check if sample time property of a block is set to -1 (inherited).

Passed

All permitted blocks have sample time set to -1 (inherited).

❑ Check usage of fixed-point data type with non-zero bias

Not Run

❑ Check type setting by data objects

Not Run

❑ 2.29.2.5 Conditional Subsystem relations **✓ Check position of conditional blocks and iterator blocks**

Identify conditional and iterative blocks that are positioned inconsistently in the model.

Passed

The conditional and iterative blocks are correctly placed in the model.

❑ Check undefined initial output for conditional subsystems

Not Run

✓ Check usage of Merge block

jc_0659: Usage restrictions of signal lines input to Merge blocks

There must not be any block between a Conditional Subsystem block and a Merge block.

Passed

No Merge block found.

✓ Check logical expressions in If blocks

Checks If blocks for complex usage of primary expressions within a logical expression

Passed

Logical expressions inside If blocks are simple

✓ Check default/else case in Switch Case blocks and If blocks

Check if default/else case in Switch Case blocks and If blocks are set to 'on'

Passed

Conditional Control blocks are valid.

❑ 2.29.2.6 Operation Blocks **❑ Check fundamental logical and numerical operations**

Not Run

✓ Check usage of Sum blocks

Identify Sum block usage that can affect readability.

Passed

No violations of the guideline found with the usage of the Sum block.

⚠ Check operator order of Product blocks

Check number of inputs to Product blocks

Warning

The following Product blocks have invalid number of inputs:

- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Product](#)
-

Recommended Action

Consider having not more than two inputs for the Product blocks.

Check signs of input signals in product blocks

Not Run

Check for parentheses in Fcn block expressions

Identify order of parentheses in Fcn block expressions.

Passed

All Fcn blocks use parentheses to mark operator precedence.

Check icon shape of Logical Operator blocks

Identify block parameter violations.

Warning

The following blocks have block parameter violations:

Block	Parameter	Current Value	Recommended Values
.../Subsystem2/Subsystem1/Platelet_Count/AND	IconShape	distinctive	rectangular

Recommended Action

Set the block parameter values to the recommended values.

Check usage of Relational Operator blocks

Identify Relational Operator blocks that connect to constants with the first (upper) input value.

Passed

This model does not contain Relational Operator blocks.

Check comparison of floating point types in Simulink

Not Run

Check usage of Lookup Tables

Check usage of recommended settings for Lookup Table blocks to prevent unexpected results.

Passed

All Lookup Table blocks have recommended settings.

Check usage of Memory and Unit Delay blocks

Not Run

Check for cascaded Unit Delay blocks

Identify cascaded and tapped pattern of Unit Delay blocks.

Passed

No cascaded Unit Delay blocks found that can be changed to Tapped Delay/Delay block.

Check usage of Discrete-Time Integrator block

Check usage of recommended settings for Discrete-Time Integrator blocks to prevent unexpected results.

Passed

All Discrete-Time Integrator blocks have recommended settings.

Check usage of the Saturation blocks

Not Run

Check output data type of operation blocks

jc_0651: Implementing a type conversion

Identify operation blocks that specify output data type.

Warning

Following operation blocks explicitly specify output data type:

- [.../Subsystem2/Subsystem1/Body_Temperature_Check/String Constant](#)
- [.../Subsystem2/Subsystem1/Body_Temperature_Check/String Constant1](#)

- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/String_Constant](#)
- [..../Subsystem2/Subsystem1/Glucometer/Subsystem/String_Constant1](#)
- [..../Subsystem2/Subsystem1/Glucometer/Subsystem/String_Constant2](#)
- [..../Subsystem2/Subsystem1/Glucometer/Subsystem/String_Constant3](#)
- [..../Subsystem2/Subsystem1/Glucometer/Subsystem/String_Constant4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/AND](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Logical_Operator1](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Logical_Operator2](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Logical_Operator3](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Logical_Operator4](#)
- [..../Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Logical_Operator](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Logical_Operator1](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Logical_Operator2](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Logical_Operator3](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Logical_Operator4](#)
- [..../Subsystem2/Subsystem1/Subsystem/Systol_Low/Logical_Operator](#)

[^ Less](#)**Recommended Action**

Instead of explicitly specifying output data type on operation blocks, use 'Data Type Conversion' block when changing the data type of the block output signal.

Check for division by zero in Simulink

Not Run

□ **2.29.2.7 Other blocks** 0 X 0 ▲ 1 ■ 0 ✓ 5 ■ 4
⚠ Check position of Import and Outport blocks**Check positions of Import blocks****Warning**

The following Import blocks are not placed to the extreme left side of the diagram:

- [Integrated_Model/Subsystem2/In1](#)
- [Integrated_Model/Subsystem2/In2](#)
- [Integrated_Model/Subsystem2/In3](#)
- [Integrated_Model/Subsystem2/In4](#)
- [Integrated_Model/Subsystem2/In5](#)
- [Integrated_Model/Subsystem2/In6](#)
- [Integrated_Model/Subsystem2/u](#)
- [Integrated_Model/Subsystem2/u1](#)
- [Integrated_Model/Subsystem2/In7](#)
- [Integrated_Model/Subsystem2/In8](#)
- [Integrated_Model/Subsystem2/Subsystem1/In8](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/In2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/In1](#)

[^ Less](#)**Recommended Action**

Move the Import blocks identified to the left of all other blocks in the diagram.

It is acceptable to move the Import block to the right only to prevent signal crossings.

Check positions of Outport blocks**Warning**

The following Outport blocks are not placed to the extreme right side of the diagram:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Out12](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out10](#)
- [Integrated_Model/Subsystem2/Out1](#)
- [Integrated_Model/Subsystem2/Out2](#)
- [Integrated_Model/Subsystem2/Out3](#)
- [Integrated_Model/Subsystem2/Out4](#)
- [Integrated_Model/Subsystem2/Out5](#)
- [Integrated_Model/Subsystem2/Out6](#)
- [Integrated_Model/Subsystem2/Out7](#)
- [Integrated_Model/Subsystem2/Out8](#)
- [Integrated_Model/Subsystem2/Out9](#)
- [Integrated_Model/Subsystem2/Out10](#)

[^ Less](#)**Recommended Action**

Move the Outport blocks identified to the right of all other blocks in the diagram.

It is acceptable to move the Outport block to the left only to prevent signal crossings.

✓ Check display for port blocks**Passed****█ Check scope of From and Goto blocks**

Not Run

✓ Check for usage of Data Store Memory blocks

Identify the usage of Data Store Memory blocks.

Passed

Usage of Data Store Memory blocks is correct.

❑ Check usage of Switch blocks

Not Run

❑ Check input and output datatype for Switch blocks

Not Run

❑ Check settings for data ports in Multiport Switch blocks

Not Run

✓ Check for missing ports in Variant Subsystems

Check for number of inputs/outputs to a Variant Subsystem.

Passed

No Variant Subsystems found having different number of inputs/outputs in the Variant Subsystem choices.

✓ Check use of default variants

na_0036: Default variant

Identify variant subsystems that do not use default variants.

Passed

All variant subsystems in the model use default variants

✓ Check use of single variable variant conditionals

Identify variant subsystems which use multi-variable compound conditions.

Passed

No variant subsystems with multiple variable compound conditions found

❑ 2.29.3 Stateflow 0 0 0 45 6

❑ 2.29.3.1 Block/Data/Events 0 0 0 5 1

❑ Check for names of Stateflow ports and associated signals

Not Run

✓ Check execution timing for default transition path

'Execute (enter) Chart At Initialization' should be set to OFF.

Passed

All Stateflow Charts pass the check.

✓ Check definition of Stateflow data

Identify the Scope value set on Stateflow data defined at machine level.

Passed

All Stateflow data at machine level has been defined as per guideline.

✓ Check usable number for first index

Identify usage of first index of Stateflow data.

Passed

All Stateflow data first index values are uniform.

✓ Check scope of data in parallel states

jc_0722: Local data definition in parallel states

The scope of local variables should be restricted to one parallel state unless it is being used by other parallel states.

Passed

No Stateflow States were found.

✓ Check definition of Stateflow events

Stateflow events should be defined at the smallest possible scope of usage.

Passed

All Stateflow events are defined at their smallest scope.

2.29.3.2 Diagram 0 0 0 14 0

✓ Check for unconnected objects in Stateflow Charts

Identify dangling transitions and unconnected Stateflow States and Junctions in Stateflow Charts.

Passed

No unconnected transitions, states or junctions found in Stateflow Charts.

✓ Check for exclusive states in state machines

Identify states which are the only substate within a state with OR(exclusive) type decomposition.

Passed

All states with OR(exclusive) type decomposition have more than one substate.

✓ Check usage of parallel states

Substates of parallel states should not be parallel states.

Passed

All Stateflow Charts pass the check.

✓ Check Stateflow transition appearance

Identify Stateflow transitions visually overlapping other Stateflow objects.

Passed

No transition violates the guidelines for Stateflow transition appearance.

✓ Check default transition placement in Stateflow charts

Identify all groupings of states that do not have a default transition or do not have the default state as the top-most state.

Passed

No Stateflow charts and states found that violate the guidelines for default transition placement in Stateflow charts.

✓ Check usage of transitions to external states

Identify transitions ending on external child states.

Passed

No direct transitions found from external state to child state.

✓ Check for unexpected backtracking in state transitions

Identify configuration parameter settings which identify unexpected backtracking in state transitions.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Unexpected backtracking (SFUnexpectedBacktrackingDiag)	error	error

✓ Check usage of internal transition

Internal transition lines should start from the left edge of the state.

Passed

No Stateflow transitions found that violate the guidelines for starting point of internal transition in Stateflow.

✓ Check usage of internal transitions in Stateflow states

Identify Stateflow states using multiple internal transitions.

Passed

No Stateflow states found with multiple internal transitions

✓ Check prohibited combination of state action and flow chart

State actions and flow charts should not be combined in states.

Passed

No Stateflow states were found that combine state action and flow chart.

✓ Check transitions in Stateflow flow charts

Identify transitions in Stateflow flow charts that are drawn incorrectly.

Passed

All Stateflow transitions in flow charts are drawn correctly.

✓ Check usage of unconditional transitions in flow charts

Identify unconditional transitions in flow charts.

Passed

All unconditional transitions adhere to the guideline.

✓ Check terminal junctions in Stateflow

Identify usage of terminal junctions in flow charts.

Passed

Multiple terminal junctions were not found.

✓ Check usage of Stateflow comments

Identify comments that are nested or contain newline(s) in the middle in Stateflow for action language 'C'.

Passed

No comments found that are either nested or contain newline(s) in the middle.

☒ 2.29.3.3 Condition Transition/Action ⚡0 ✖0 ⚠0 ✎0 ✓12 ⌂5

✓ Check Stateflow chart action language

Check if the action language of Stateflow charts is set to 'C'.

Passed

All Stateflow Charts have action language set to 'C'.

✓ Check usage of numeric literals in Stateflow

Identify use of numeric literals in Stateflow states and transitions.

Passed

No numeric literals found in Stateflow charts.

✓ Check for pointers in Stateflow charts

Identify pointer operations on custom code variables.

Note: This check applies only to Stateflow charts that use C as the action language.

Passed

No pointer operations were found.

✓ Check usage of events in Stateflow charts

Identify undirected event broadcasts in Stateflow.

Passed

No instances of undirected event broadcast were found.

✓ Check order of state action types

Identify out of order state action types in Stateflow states.

Passed

No Stateflow states found with out of order state action types

✓ Check repetition of Action types

jc_0734: Number of state action types

Identifies repeated action types in a Stateflow State.

Passed

No Stateflow States were found.

✓ Check if state action type 'exit' is used in the model

Check if state action type 'exit' is used in the model.

Passed

State action type 'exit' is not used in the model.

✓ Check updates to variables used in state transition conditions

jc_0741: Timing to update data used in state chart transition conditions

Variables used in state transition conditions must not perform an update by "during" state action type.

Passed

No Stateflow states found that violate the guidelines for updating the variables used in state transition conditions.

✓ Check usage of transition conditions in Stateflow transitions

Identify unconditional Stateflow transitions with higher priority than conditional transitions.

Passed

No unconditional Stateflow transitions found with higher priority than conditional transitions

✓ Check condition actions and transition actions in Stateflow

Identify usage of transition actions in Stateflow.

Passed

No Stateflow charts have transition actions.

✓ Check for MATLAB expressions in Stateflow blocks

Identify MATLAB expressions that are not suitable for code generation in Stateflow blocks.

Passed

No Stateflow objects found using MATLAB expressions unsuitable for code generation.

☐ Check usage of floating-point expressions in Stateflow charts

Not Run

☐ Check Stateflow operators

Not Run

☐ Check prohibited comparison operation of logical type signals

Not Run

☐ Check usage of unary minus operations in Stateflow charts

Not Run

☐ Check for implicit type casting in Stateflow

Not Run

✓ Check usage of graphical functions in Stateflow

Check for calls between graphical functions.

Passed

No calls between graphical functions were found.

☒ 2.29.3.4 Label Description **✓ Check uniqueness of Stateflow State and Data names**

jc_0732: Distinction between state names, data names, and event names

Identify Stateflow State and Stateflow Data that have identical names in a given chart.

Passed

No Stateflow charts were found.

✓ Check uniqueness of State names

jc_0730: Unique state name in Stateflow blocks
Identifies identical State names within a Stateflow Chart.

Passed

No Stateflow charts were found.

✓ Check usage of State names

jc_0731: State name format
Identify state names with '/' at its end.

Passed

No Stateflow states were found.

✓ Check entry formatting in State blocks in Stateflow charts

Identify missing line breaks between entry action (en), during action (du), and exit action (ex) entries in states. Identify missing line breaks after semicolons (;) in statements.

Passed

All state entries found are correctly formatted.

✓ Check indentation of code in Stateflow states

Identify non-uniform indentation in Stateflow blocks.

Passed

All Stateflow blocks have uniform indentation.

✓ Check for usage of text inside states

Identify Stateflow states with text exceeding the boundary of the state.

Passed

No Stateflow states found with text exceeding the boundary of the state.

✓ Check position of label string in Stateflow transition

Identify placement of label string in Stateflow transition.

Passed

All Stateflow transitions are placed uniformly.

✓ Check position of comments in transition labels

Identify comments in transition labels that are not positioned uniformly.

Passed

Comments in transition labels are positioned uniformly.

✓ Check usage of parentheses in Stateflow transitions

jc_0752: Condition action in transition label

Start new line before and after parentheses for condition actions in Stateflow transitions.

Passed

No Stateflow Transitions found that violate the requirement for new line for condition actions.

✓ Check for comments in unconditional transitions

Identify comments in unconditional transitions without action statements.

Passed

All unconditional transitions without action statements have comments.

☒ 2.29.3.5 Miscellaneous 0 0 0 4 0

✓ Check return value assignments in Stateflow graphical functions

Identify graphical functions with multiple assignments of return values in Stateflow charts.

Passed

No Stateflow charts were found.

✓ Check uniqueness of Stateflow State and Data names

jc_0732: Distinction between state names, data names, and event names
Identify Stateflow State and Stateflow Data that have identical names in a given chart.

Passed

No Stateflow charts were found.

✓ Check usage of Simulink functions in Stateflow

Usage of Simulink Functions in Stateflow.

Passed

All Simulink Functions in Stateflow are defined according to the guideline.

✓ Check use of Simulink in Stateflow charts

na_0039: Limitation on Simulink functions in Chart blocks

Check use of Stateflow charts nested inside Simulink functions used in Stateflow.

Passed

No Stateflow charts found nested inside Simulink functions used in Stateflow.

☒ 2.29.4 MATLAB      **☒ 2.29.4.1 Data and Operations**      **✓ Check MATLAB code for global variables**

Check for global variables in MATLAB code

Check for global variables in MATLAB code used in MATLAB Function blocks

Passed

No MATLAB Function blocks found

Check for global variables in MATLAB functions defined in Stateflow charts

Passed

No MATLAB functions defined in Stateflow charts found

Check for global variables in called MATLAB functions

Passed

No external MATLAB functions found

☒ Check usage of enumerated values

Not Run

✓ Check input and output settings of MATLAB Functions

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

Passed

No MATLAB Functions found in the model or subsystem.

☒ 2.29.4.2 Usage      **✓ Check lines of code in MATLAB Functions**

Identify MATLAB Functions with high number of effective lines of code.

Passed

No MATLAB Function found with high number of effective lines of code.

✓ Check the number of function calls in MATLAB Function blocks

Checks whether number of function calls in MATLAB Function blocks is less than 3.

Passed

Number of function calls in MATLAB Function blocks is less than 3.

✓ Check nested conditions in MATLAB Functions

Identify nested if/else and case statements in MATLAB Functions.

Passed

No MATLAB Function found with deeply nested if/else and case statements.

✓ Check usage of character vector inside MATLAB Function block

Identify usage of strings in MATLAB Function blocks.

Passed

No character vectors found in MATLAB Function block

✓ Check usage of recommended patterns for Switch/Case statements

Identify usage of non-constant variables in Switch/Case statements.

Passed

Non-constant variables are not used as Switch/Case arguments

❑ Check for use of C-style comment symbols

Not Run

❑ 2.30 Modeling Standards for JMAAB

0 0 22 0 81 25

❑ 2.30.1 Naming Conventions

0 0 4 0 8 2

⚠ Check file names

Characters allowed for file names

Warning

The following files have invalid names:

- C:\Users\hp\Desktop\L&T Work\MBD\AMBD_GlucoMeter_V2.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\AMBD_GlucoMeter_V3.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\AMBD_GlucoMeter_Yash.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\Integrated_Model.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\ThyroidCheckupV1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\bloodover1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\bp_check_ver1_1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\bpcheck_ver1_1.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\project.slx.autosave
- C:\Users\hp\Desktop\L&T Work\MBD\temperature.slx.autosave

Recommended Action

Consider having only alphanumeric characters and underscores in file name.

Single reserved MATLAB word

Warning

The following files have Reserved MATLAB words as the file name:

- C:\Users\hp\Desktop\L&T Work\MBD\project.slx

Recommended Action

Consider not having Reserved MATLAB word as the file name.

Identical file names on path

Warning

The following files have names which are identical to files present in MATLAB path:

- C:\Users\hp\Desktop\L&T Work\MBD\project.slx

Recommended Action

Consider having unique file names.

✓ Check folder names

Check the folder name to ensure that the name complies with the recommended guidelines.

Passed

All folders have correct names.

✓ Check subsystem names

Passed

⚠ Check port block names

Characters allowed for port block names

Warning

The following port blocks have invalid names:

- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Input values](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Input value](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Input value](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Input value](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Input value](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Input value](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Input values](#)

Recommended Action

Consider having only alphanumeric characters and underscores in port block name.

⚠ Check character usage in block names

Characters allowed for block names

Warning

The following blocks have invalid names:

- [.../Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic](#)
- [.../Subsystem2/Subsystem1/Thyroid_Check/low thyroid symptomatic](#)
- [.../Subsystem2/Subsystem1/Thyroid_Check/subclinical low thyroid](#)
- [.../Subsystem2/Subsystem1/Thyroid_Check/subclinical overactive thyroid](#)

Recommended Action

Consider having only alphanumeric characters and underscores in block name.

⚠ Check character usage in signal names and bus names

Characters allowed for signal names and bus names

Warning

The following signals or buses have invalid names:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_grp_A+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_0-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_A-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_O+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_B-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_AB+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group_AB-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood group](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Normal Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Mild Loss](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Severe Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Moderate Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Failure Condition](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 93](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 95](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 94](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 96](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 97](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 98](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input = 99](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input less than 93](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Input more than 99](#)

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Recommended Action

Consider having only alphanumeric characters and underscores in signal names and bus names.

ⓘ Check character usage in parameter names

Not Run

✓ Check length of model file name

Check length of model file name

Passed

Model name is valid.

✓ Check length of folder name at every level of model path

The model file name is: [Integrated_Model](#)

Passed

Folder names are valid.

✓ Check length of subsystem names**Passed****✓ Check length of Import and Outport names****Passed****✓ Check length of signal and bus names**

Check length of signal and bus names

Passed

All signal and bus names are valid.

✗ Check length of parameter names

Not Run

✓ Check length of block names**Passed****✗ 2.30.2 Model Architecture**

0 0 0 1 0 0 0

⚠ Check for mixing basic blocks and subsystems

Identify levels in the model that include basic blocks and subsystems. Each level of a model must be designed with blocks of the same level (for example, only subsystems or only basic blocks).

Warning

The following level(s) in the model include basic blocks and subsystems:

System	Block path
.../Subsystem2/Subsystem1/Glucometer	.../Subsystem1/Glucometer/Constant
.../Subsystem2/Subsystem1/Glucometer	.../Subsystem2/Subsystem1/Glucometer/Display
.../Subsystem2/Subsystem1/Platelet_Count	.../Subsystem2/Subsystem1/Platelet_Count/AND
.../Subsystem2/Subsystem1/Platelet_Count	.../Subsystem1/Platelet_Count/Display
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Constant
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem1/Subsystem/Constant1
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display1
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem1/Subsystem/Display10
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem1/Subsystem/Display11
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display2
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display3
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display4
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display5
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display6
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display7
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display8
.../Subsystem2/Subsystem1/Subsystem	.../Subsystem2/Subsystem1/Subsystem/Display9

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Recommended Action

If possible, replace blocks at the identified level of the model hierarchy with basic blocks. Move nonvirtual blocks into the identified subsystem.

✗ 2.30.3 Model Configuration Options

0 0 0 1 0 1 0

✓ Check Implement logic signals as Boolean data (vs. double)

Identify whether **Implement logic signals as Boolean data (vs. double)** is selected.

Passed

Implement logic signals as Boolean data (vs. double) is selected.

⚠ Check diagnostic settings for incorrect calculation results

Identify data validity diagnostic settings which detect incorrect calculation results.

Warning

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

Status	Parameter	Current Value	Recommended Values
Warning	Division by singular matrix (CheckMatrixSingularityMsg)	none	error
Warning	Inf or NaN block output (SignalInfNanChecking)	none	error
Warning	Wrap on overflow (IntegerOverflowMsg)	warning	error
Warning	Saturate on overflow (IntegerSaturationMsg)	warning	error

Recommended Action

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

☒ 2.30.4 Simulink ⚡ 0 ⚠ 16 ✅ 0 ✓ 23 ⌂ 16

⚠ Check for Simulink diagrams using nonstandard display attributes

Identify nonstandard display attributes in Simulink diagrams.

Check format settings

Identify incorrect model-level format options.

Warning

The following format display options are incorrect.

Display Attribute	Recommended Value	Actual Value
Debug > Information Overlays > Nonscalar Signals	on	off
Modeling > Environment > Model Browser	off	on
Debug > Information Overlays > Show All Links	none	disabled

Recommended Action

Set the format options to the recommended value.

Check block colors

Identify blocks using nonstandard colors.

Passed

All blocks use standard colors.

Check canvas colors

Identify canvases that are not white.

Passed

All diagrams use a white canvas.

Check diagram zoom

Identify diagrams that do not have zoom factor set to 100 %.

Note: Zoom factors can differ for each instance of a model diagram opened in Simulink Editor

Warning

The following diagrams do not have zoom factor set to 100 percent:

- [Integrated_Model](#)
- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)

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Recommended Action

For each listed diagram, select **Modeling > Environment > Zoom > Normal View (100%)**.

⚠ Check Model font settings

Check font size in Simulink block and signal names

Warning

The font size of the following Simulink block or signal names are different from input parameters:

- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/Subsystem](#)

Recommended Action

Consider modifying font size of block and signal names as per input parameters.

⚠ Check position of Import and Outport blocks

Check positions of Import blocks

Warning

The following Import blocks are not placed to the extreme left side of the diagram:

- [Integrated_Model/Subsystem2/In1](#)
- [Integrated_Model/Subsystem2/In2](#)
- [Integrated_Model/Subsystem2/In3](#)
- [Integrated_Model/Subsystem2/In4](#)
- [Integrated_Model/Subsystem2/In5](#)
- [Integrated_Model/Subsystem2/In6](#)
- [Integrated_Model/Subsystem2/u](#)
- [Integrated_Model/Subsystem2/u1](#)
- [Integrated_Model/Subsystem2/In7](#)
- [Integrated_Model/Subsystem2/In8](#)
- [Integrated_Model/Subsystem2/Subsystem1/In8](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/In2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition Of Kidney/In1](#)

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Recommended Action

Move the Import blocks identified to the left of all other blocks in the diagram.

It is acceptable to move the Import block to the right only to prevent signal crossings.

Check positions of Outport blocks

Warning

The following Outport blocks are not placed to the extreme right side of the diagram:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Out12](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out10](#)
- [Integrated_Model/Subsystem2/Out1](#)
- [Integrated_Model/Subsystem2/Out2](#)
- [Integrated_Model/Subsystem2/Out3](#)
- [Integrated_Model/Subsystem2/Out4](#)
- [Integrated_Model/Subsystem2/Out5](#)
- [Integrated_Model/Subsystem2/Out6](#)
- [Integrated_Model/Subsystem2/Out7](#)
- [Integrated_Model/Subsystem2/Out8](#)
- [Integrated_Model/Subsystem2/Out9](#)
- [Integrated_Model/Subsystem2/Out10](#)

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Recommended Action

Move the Outport blocks identified to the right of all other blocks in the diagram.

It is acceptable to move the Outport block to the left only to prevent signal crossings.

✓ Check whether block names appear below blocks

Passed

⚠ Check the display attributes of block names

Identify whether to display block names.

Check for non-descriptive displayed block names

Identify block names that are displayed but should be hidden due to a lack of a descriptive name.

Passed

All displayed names provide descriptive information.

Check for blocks with hidden names and obvious function

Identify block names that are displayed but can be hidden due to obvious behavior.

Warning

The following block names can be hidden:

- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/121+Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/129-Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Range_Lower](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Range_Upper](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/130+Compare](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/139-Compare](#)

- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Range_Lower](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Range_Upper](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/140+Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/159-Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Range_Lower](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Range_Upper](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/180+Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/260-Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Range_Lower](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Range_Upper](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/100-Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/90+compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Range_Lower](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Range_Upper](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/120Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Range_compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/121+Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/129-Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Range_Lower](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Range_Upper](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/130+Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/139-Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Range_Lower](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Range_Upper](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/140+Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/159-Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Range_Lower](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Range_Upper](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis180+Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis260-Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Range_Lower](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Range_Upper](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Low100-Compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Low90+compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Range_Lower](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Range_Upper](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/120Compare](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Normal/Range_compare](#)
- [Integrated Model/Subsystem2/Subsystem1/Thyroid_Check/Compare To Normal](#)
- [.../Subsystem2/Subsystem1/Thyroid_Check/Compare To low thyroid symptomatic](#)
- [.../Subsystem2/Subsystem1/Thyroid_Check/Compare To low thyroid symptomatic](#)
- [.../Subsystem2/Subsystem1/Thyroid_Check/Compare To subclinical low thyroid](#)
- [.../Subsystem1/Thyroid_Check/Compare To subclinical overactive thyroid](#)

[^ Less](#)**Recommended Action**Hide the block name by selecting (**Format > Auto Name > Hide Automatic Block Name**).**Check for missing block names**

Identify block names that are hidden but should be displayed to show a descriptive name.

Warning

The following blocks have descriptive names, however, the names are hidden:

- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Lamp](#)

Recommended ActionModify the blocks to show the block name by deselecting (**Format > Auto Name > Hide Automatic Block Name**).**⚠ Check for nondefault block attributes**

Identify blocks that use and fail to display nondefault values.

Warning

The following blocks use and fail to display nondefault values:

Block	Parameter	Expected Value	Actual Value
.../Body_Temperature_Check/Switch1	Threshold	0	15
.../Body_Temperature_Check/Switch2	Threshold	0	15

Recommended Action

For the above blocks, display the nondefault value using the Block Annotation pane of the Block Properties dialog box.

✓ Check trigger signal names

Identify trigger blocks where the origin of the trigger signal and the destination have dissimilar names.

Passed

No violation of the guideline for use of trigger signal names.

⚠ Check for unconnected signal lines and blocks**Check for unconnected subsystems and basic blocks**

Warning

The following blocks in the model are not connected:

- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Signal_Builder](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/In2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Out2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/In1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Out1](#)

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Recommended Action

Connect the blocks to the correct source or destination block.

If the destination block is not known, use a Terminator or Ground block to terminate the line.

Check usage of Switch blocks

Not Run

Check usage of Relational Operator blocks

Identify Relational Operator blocks that connect to constants with the first (upper) input value.

Passed

This model does not contain Relational Operator blocks.

Check Indexing Mode

Identify blocks and charts with inconsistent Indexing mode.

Passed

No inconsistent Indexing mode used in the 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 definition of signal labels

Identify blocks that require labeled signals. A subset of source and destination blocks require labeled signals.

Check source block labels**Warning**

The following signals have no label:

- [Integrated_Model/Subsystem2/In1/](#)
- [Integrated_Model/Subsystem2/In2/](#)
- [Integrated_Model/Subsystem2/In3/](#)
- [Integrated_Model/Subsystem2/In4/](#)
- [Integrated_Model/Subsystem2/In5/](#)
- [Integrated_Model/Subsystem2/In6/](#)
- [Integrated_Model/Subsystem2/u/](#)
- [Integrated_Model/Subsystem2/u1/](#)
- [Integrated_Model/Subsystem2/In7/](#)
- [Integrated_Model/Subsystem2/In8/](#)
- [Integrated_Model/Subsystem2/In9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/u1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/In10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/u/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/In1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/In2/](#)

- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/ln1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Glucometer/Subsystem/ln1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/ln10/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Input values/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Input_value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Input values/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Input_value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Input value/](#)
- [Integrated Model/Subsystem2/Subsystem1/Thyroid_Check/u/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/From/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/From1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/From2/](#)
- [Integrated Model/Subsystem2/Subsystem1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Classification/](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Platelet_Count/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/](#)
- [Integrated Model/Subsystem2/Subsystem1/Glucometer/](#)
- [Integrated Model/Subsystem2/Subsystem1/Glucometer/Subsystem/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/](#)
- [Integrated Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/](#)
- [Integrated Model/Subsystem2/Subsystem1/Thyroid_Check/](#)
- [Integrated Model/Subsystem2/Subsystem1/Urine_Analysis/](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant2/](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant3/](#)
- [Integrated Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Constant4/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Body_Temperature_Check/Constant2/](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Constant/](#)
- [Integrated Model/Subsystem2/Subsystem1/Glucometer/Constant/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant10/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant2/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant3/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant4/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant5/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant6/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant7/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant8/](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Constant9/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant10/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant11/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant12/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant13/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Constant9/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant5/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant6/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant7/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Constant8/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant1/](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant14/](#)

- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant25/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Constant26/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant15/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant16/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant17/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant18/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Constant27/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant19/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant20/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant21/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant22/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Constant28/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant23/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant24/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant25/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Constant8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant13/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant14/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Constant26/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant15/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant16/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant17/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant18/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Constant27/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant19/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant20/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant21/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant22/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Constant28/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant23/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant24/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Constant9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low_thyroid_symptomatic/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/low_thyroid_symptomatic/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical_low_thyroid/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/subclinical_overactive_thyroid/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/Constant8/](#)

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Recommended Action

Add a new or propagated label to the signal line.

Identify blocks that require labeled signals. A subset of source and destination blocks require labeled signals.

Check destination block labels

Warning

The following signals have no label:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Out2/](#)

- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Out12/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcisis1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcisis/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out5/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out6/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out7/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out8/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out9/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out10/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Out12/](#)
- [Integrated_Model/Subsystem2/Out1/](#)
- [Integrated_Model/Subsystem2/Out2/](#)
- [Integrated_Model/Subsystem2/Out3/](#)
- [Integrated_Model/Subsystem2/Out4/](#)
- [Integrated_Model/Subsystem2/Out5/](#)
- [Integrated_Model/Subsystem2/Out6/](#)
- [Integrated_Model/Subsystem2/Out7/](#)
- [Integrated_Model/Subsystem2/Out8/](#)
- [Integrated_Model/Subsystem2/Out9/](#)
- [Integrated_Model/Subsystem2/Out10/](#)
- [Integrated_Model/Subsystem2/Out11/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Goto2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcisis1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcisis/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check/](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis/](#)

[▲] Less**Recommended Action**

Add a new or propagated label to the signal line.

⚠ Check Signal name propagation

Check Signal name propagation for subsystems

Warning

The following subsystems do not have propagated signal labels:

◀ Less

Recommended Action

Add labels and enable signal propagation by selecting 'Show propagated signal' parameter for signals.

✓ Check usage of Discrete-Time Integrator block

Check usage of recommended settings for Discrete-Time Integrator blocks to prevent unexpected results.

Passed

All Discrete-Time Integrator blocks have recommended settings.

✗ Check settings for data ports in Multiport Switch blocks

Not Run

✗ Check usage of fixed-point data type with non-zero bias

Not Run

✗ Check input and output datatype for Switch blocks

Not Run

✗ Check signs of input signals in product blocks

Not Run

✓ Check Signed Integer Division Rounding mode

jc_0642: Integer rounding mode setting

Identifies blocks with block parameter 'Integer Rounding Mode' set to 'Simplest' when the configuration parameter 'Signed integer division rounds to' is set to 'Undefined'.

Passed

Configuration parameter 'Signed integer division rounds to' is not set to 'Undefined'.

✗ Check type setting by data objects

Not Run

✗ Check usage of the Saturation blocks

Not Run

✓ Check usage of Merge block

jc_0659: Usage restrictions of signal lines input to Merge blocks

There must not be any block between a Conditional Subsystem block and a Merge block.

Passed

No Merge block found.

✗ Check usage of Memory and Unit Delay blocks

Not Run

✓ Check block orientation

Identify blocks which are rotated or reversed.

Passed

No blocks found with rotated or reversed orientation

✓ Check if blocks are shaded in the model

Check if blocks are shaded in the model

Passed

Blocks in the model are not shaded.

⚠ Check operator order of Product blocks

Check number of inputs to Product blocks

Warning

The following Product blocks have invalid number of inputs:

- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check/Product](#)

Recommended Action

Consider having not more than two inputs for the Product blocks.

⚠ Check icon shape of Logical Operator blocks

Identify block parameter violations.

Warning

The following blocks have block parameter violations:

Block	Parameter	Current Value	Recommended Values
..../Subsystem2/Subsystem1/Platelet_Count/AND	IconShape	distinctive	rectangular

Recommended Action

Set the block parameter values to the recommended values.

⚠ Check if tunable block parameters are defined as named constants

Check if tunable block parameters are defined as named constants

Warning

The following tunable block parameters are not defined as named constants.

Block	Violations
..../Subsystem1/Blood_Classification/Constant	Value : 2
..../Blood_Platelet_Count/Constant3	Value : 2
..../Blood_Platelet_Count/Constant4	Value : 2
..../Body_Temperature_Check/Constant2	Value : 55
..../Body_Temperature_Check/Switch1	Threshold : 15
..../Body_Temperature_Check/Switch2	Threshold : 15
..../Subsystem1/Condition_Of_Kidney/Constant	Value : 41.2
..../Subsystem1/Condition_Of_Kidney/Constant2	Value : 2
..../Subsystem1/Condition_Of_Kidney/Constant3	Value : 4
..../Subsystem1/Condition_Of_Kidney/Constant4	Value : 3
..../Subsystem1/Condition_Of_Kidney/Constant5	Value : 5
..../Subsystem1/Glucometer/Constant	Value : 5.8
..../Platelet_Count/Subsystem1/Constant12	Value : 2
..../Platelet_Count/Subsystem1/Constant13	Value : 2
..../Platelet_Count/Subsystem2/Constant7	Value : 2
..../Platelet_Count/Subsystem2/Constant8	Value : 2
..../Platelet_Count/Subsystem3/Constant14	Value : 2
..../Platelet_Count/Subsystem3/Constant4	Value : 2
..../Subsystem2/Subsystem1/Subsystem/Constant	Value : 156
..../Subsystem1/Subsystem/Constant1	Value : 96
..../Subsystem/Diastol_Elevated1/Constant25	Value : 3
..../Subsystem/Diastol_Ht3/Constant26	Value : 4
..../Subsystem/Diastol_Ht4/Constant27	Value : 5
..../Subsystem/Diastol_Htcrisis1/Constant28	Value : 6
..../Subsystem/Diastol_Normal1/Constant24	Value : 2
..../Subsystem/Systol_Elevated/Constant25	Value : 3
..../Subsystem/Systol_Ht1/Constant26	Value : 4
..../Subsystem/Systol_Ht2/Constant27	Value : 5
..../Subsystem/Systol_Htcrisis/Constant28	Value : 6
..../Subsystem/Systol_Normal/Constant24	Value : 2
..../Subsystem1/Thyroid_Check/Constant5	Value : 4
..../Subsystem1/Thyroid_Check/Normal	Value : 2
..../Thyroid_Check/low_thyroid_symptomatic	Value : 4
..../Thyroid_Check/subclinical_low_thyroid	Value : 3
..../Subsystem1/Urine_Analysis/Constant1	Value : 7
..../Subsystem1/Urine_Analysis/Constant2	Value : 2
..../Subsystem1/Urine_Analysis/Constant3	Value : 3
..../Subsystem1/Urine_Analysis/Constant4	Value : 4
..../Subsystem1/Urine_Analysis/Constant5	Value : 5
..../Subsystem1/Urine_Analysis/Constant6	Value : 6
..../Subsystem1/Urine_Analysis/Constant7	Value : 7
..../Subsystem1/Urine_Analysis/Constant8	Value : 7

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Recommended Action

Consider changing tunable block parameter literal values to named constants.

✓ Check default/else case in Switch Case blocks and If blocks

Check if default/else case in Switch Case blocks and If blocks are set to 'on'

Passed

Conditional Control blocks are valid.

✓ Check usage of Lookup Tables

Check usage of recommended settings for Lookup Table blocks to prevent unexpected results.

Passed

All Lookup Table blocks have recommended settings.

✓ Check for parentheses in Fcn block expressions

Identify order of parentheses in Fcn block expressions.

Passed

All Fcn blocks use parentheses to mark operator precedence.

□ Check undefined initial output for conditional subsystems

Not Run

✓ Check for avoiding algebraic loops between subsystems

jc_0653: Delay block layout in feedback loops

Identify delay blocks usage in feedback loops.

Passed

No delay blocks in feedback loops violate the guidelines for avoiding algebraic loops between subsystems.

□ Check comparison of floating point types in Simulink

Not Run

✓ Check duplication of Simulink Data names

Simulink Data names should be unique across base workspace, model workspace and data dictionary.

Passed

All Simulink Data names are unique.

□ Check unused data in Simulink Model

Not Run

⚠ Check output data type of operation blocks

jc_0651: Implementing a type conversion

Identify operation blocks that specify output data type.

Warning

Following operation blocks explicitly specify output data type:

- [.../Subsystem2/Subsystem1/Body_Temperature_Check/String Constant](#)
- [.../Subsystem2/Subsystem1/Body_Temperature_Check/String Constant1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem/String Constant](#)
- [.../Subsystem2/Subsystem1/Glucometer/Subsystem/String Constant1](#)
- [.../Subsystem2/Subsystem1/Glucometer/Subsystem/String Constant2](#)
- [.../Subsystem2/Subsystem1/Glucometer/Subsystem/String Constant3](#)
- [.../Subsystem2/Subsystem1/Glucometer/Subsystem/String Constant4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/AND](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1/Logical Operator1](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Ht3/Logical Operator2](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Ht4/Logical Operator3](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1/Logical Operator4](#)
- [.../Subsystem2/Subsystem1/Subsystem/Diastol_Low1/Logical Operator](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Elevated/Logical Operator1](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Ht1/Logical Operator2](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Ht2/Logical Operator3](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis/Logical Operator4](#)
- [.../Subsystem2/Subsystem1/Subsystem/Systol_Low/Logical Operator](#)

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Recommended Action

Instead of explicitly specifying output data type on operation blocks, use 'Data Type Conversion' block when changing the data type of the block output signal.

⚠ Check Model Description

Identify layers in the model having inconsistent description format.

Warning

Following layers do not have model descriptions:

- [Integrated_Model](#)
- [Integrated_Model/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Body_Temperature_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Elevated1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Ht4](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Htcrisis1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Low1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Diastol_Normal1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Elevated](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Ht2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Htcrisis](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Low](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem/Systol_Normal](#)

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Recommended Action

Consider adding model description for all the layers.

Identify layers in the model having inconsistent description format.

Warning

Following layers do not have consistent model description format:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Condition_Of_Kidney](#)
- [Integrated_Model/Subsystem2/Subsystem1/Glucometer](#)
- [Integrated_Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem1](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem2](#)
- [Integrated_Model/Subsystem2/Subsystem1/Platelet_Count/Subsystem3](#)
- [Integrated_Model/Subsystem2/Subsystem1/Subsystem](#)
- [Integrated_Model/Subsystem2/Subsystem1/Thyroid_Check](#)
- [Integrated_Model/Subsystem2/Subsystem1/Urine_Analysis](#)

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Recommended Action

Consider having a consistent format for the model description

Example: If description tags are 'Input:', 'Description:', and 'Output:' then format should be as following:

Input: add input information here

Description: add model description here

Output: add output information here

✓ Check for consistency in model element names

Check if model elements connected to a signal are following consistent naming.

Passed

Model elements connected to a signal are following consistent names.

✓ Check for sample time setting

Check if sample time property of a block is set to -1 (inherited).

Passed

All permitted blocks have sample time set to -1 (inherited).

✓ Check usage of Sum blocks

Identify Sum block usage that can affect readability.

Passed

No violations of the guideline found with the usage of the Sum block.

⚠ Check position of signal labels**Check location of signal labels****Warning**

The following signals do not have labels located at the origin of the signal line:

- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_AB-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_O+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_A-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_grp_A+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_0-](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_AB+](#)
- [Integrated_Model/Subsystem2/Subsystem1/Blood_Classification/Blood_group_B](#)

- [Integrated Model/Subsystem2/Subsystem1/Blood Classification/Blood group_B-](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Mild Loss](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Moderate Condition](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Severe Condition](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Normal Condition](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input = 94](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input = 99](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input more than 99](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input = 96](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input = 95](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input = 93](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input = 98](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input less than 93](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter/Input = 97](#)

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Recommended Action

Consider placing the labels at the origin of the signal line.

Check overlap of signal labels

Warning

The following signals have labels which overlap other objects:

- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Failure Condition](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Mild Loss](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Moderate Condition](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Severe Condition](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney/Normal Condition](#)

Recommended Action

Consider placing the signal label so that it is readable.

✓ Check for missing ports in Variant Subsystems

Check for number of inputs/outputs to a Variant Subsystem.

Passed

No Variant Subsystems found having different number of inputs/outputs in the Variant Subsystem choices.

✓ Check for cascaded Unit Delay blocks

Identify cascaded and tapped pattern of Unit Delay blocks.

Passed

No cascaded Unit Delay blocks found that can be changed to Tapped Delay/Delay block.

✓ Check for usage of Data Store Memory blocks

Identify the usage of Data Store Memory blocks.

Passed

Usage of Data Store Memory blocks is correct.

█ Check fundamental logical and numerical operations

Not Run

⚠ Check signal flow in model

Check placement of sequential blocks

Warning

The placement of blocks in the following subsystems can be improved:

- [Integrated Model/Subsystem2/Subsystem1/Blood Platelet Count](#)
- [Integrated Model/Subsystem2/Subsystem1/Condition Of Kidney](#)
- [Integrated Model/Subsystem2/Subsystem1/Glucometer/Subsystem](#)
- [Integrated Model/Subsystem2/Subsystem1/Oximeter](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet Count/Subsystem1](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet Count/Subsystem2](#)
- [Integrated Model/Subsystem2/Subsystem1/Platelet Count/Subsystem3](#)
- [Integrated Model/Subsystem2/Subsystem1/Thyroid Check](#)
- [Integrated Model/Subsystem2/Subsystem1/Urine Analysis](#)

Recommended Action

Ensure that the signal flow in the mentioned subsystems is from left to right.

- All sequential blocks, except the blocks on feedback path, must be placed from left to right.
 - All blocks, except the blocks on feedback path, should be oriented to the right.
-

█ Check usage of vector and bus signals

Not Run

Passed

No Stateflow charts and states found that violate the guidelines for default transition placement in Stateflow charts.

✓ Check definition of Stateflow data

Identify the Scope value set on Stateflow data defined at machine level.

Passed

All Stateflow data at machine level has been defined as per guideline.

✓ Check for MATLAB expressions in Stateflow blocks

Identify MATLAB expressions that are not suitable for code generation in Stateflow blocks.

Passed

No Stateflow objects found using MATLAB expressions unsuitable for code generation.

✓ Check for pointers in Stateflow charts

Identify pointer operations on custom code variables.

Note: This check applies only to Stateflow charts that use C as the action language.

Passed

No pointer operations were found.

□ Check Stateflow operators

Not Run

□ Check usage of unary minus operations in Stateflow charts

Not Run

✓ Check usage of Stateflow comments

Identify comments that are nested or contain newline(s) in the middle in Stateflow for action language 'C'.

Passed

No comments found that are either nested or contain newline(s) in the middle.

□ Check prohibited comparison operation of logical type signals

Not Run

✓ Check usage of internal transitions in Stateflow states

Identify Stateflow states using multiple internal transitions.

Passed

No Stateflow states found with multiple internal transitions

✓ Check usage of transition conditions in Stateflow transitions

Identify unconditional Stateflow transitions with higher priority than conditional transitions.

Passed

No unconditional Stateflow transitions found with higher priority than conditional transitions

✓ Check uniqueness of Stateflow State and Data names

jc_0732: Distinction between state names, data names, and event names

Identify Stateflow State and Stateflow Data that have identical names in a given chart.

Passed

No Stateflow charts were found.

✓ Check uniqueness of State names

jc_0730: Unique state name in Stateflow blocks

Identifies identical State names within a Stateflow Chart.

Passed

No Stateflow charts were found.

✓ Check usage of parentheses in Stateflow transitions

jc_0752: Condition action in transition label

Start new line before and after parentheses for condition actions in Stateflow transitions.

Passed

No Stateflow Transitions found that violate the requirement for new line for condition actions.

✓ Check prohibited combination of state action and flow chart

State actions and flow charts should not be combined in states.

Passed

No Stateflow states were found that combine state action and flow chart.

✓ Check condition actions and transition actions in Stateflow

Identify usage of transition actions in Stateflow.

Passed

No Stateflow charts have transition actions.

✓ Check usable number for first index

Identify usage of first index of Stateflow data.

Passed

All Stateflow data first index values are uniform.

✓ Check usage of State names

jc_0731: State name format

Identify state names with '/' at its end.

Passed

No Stateflow states were found.

✓ Check execution timing for default transition path

'Execute (enter) Chart At Initialization' should be set to OFF.

Passed

All Stateflow Charts pass the check.

✓ Check repetition of Action types

jc_0734: Number of state action types

Identifies repeated action types in a Stateflow State.

Passed

No Stateflow States were found.

✓ Check for unused data in Stateflow Charts

Checks if the model parameter 'Unused data, events, messages and functions' is not set to 'none'.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Unused data, events, messages and functions (SFUnusedDataAndEventsDiag)	warning	error, warning

✓ Check updates to variables used in state transition conditions

jc_0741: Timing to update data used in state chart transition conditions

Variables used in state transition conditions must not perform an update by "during" state action type.

Passed

No Stateflow states found that violate the guidelines for updating the variables used in state transition conditions.

✓ Check usage of internal transition

Internal transition lines should start from the left edge of the state.

Passed

No Stateflow transitions found that violate the guidelines for starting point of internal transition in Stateflow.

✓ Check usage of parallel states

Substates of parallel states should not be parallel states.

Passed

All Stateflow Charts pass the check.

✓ Check scope of data in parallel states

jc_0722: Local data definition in parallel states

The scope of local variables should be restricted to one parallel state unless it is being used by other parallel states.

Passed

No Stateflow States were found.

✓ Check indentation of code in Stateflow states

Identify non-uniform indentation in Stateflow blocks.

Passed

All Stateflow blocks have uniform indentation.

✓ Check for usage of text inside states

Identify Stateflow states with text exceeding the boundary of the state.

Passed

No Stateflow states found with text exceeding the boundary of the state.

✓ Check for unexpected backtracking in state transitions

Identify configuration parameter settings which identify unexpected backtracking in state transitions.

Passed

All constraints on model configuration parameters have been met.

Status	Parameter	Current Value	Recommended Values
Pass	Unexpected backtracking_(SFUnexpectedBacktrackingDiag)	error	error

✓ Check for unconnected objects in Stateflow Charts

Identify dangling transitions and unconnected Stateflow States and Junctions in Stateflow Charts.

Passed

No unconnected transitions, states or junctions found in Stateflow Charts.

✓ Check position of label string in Stateflow transition

Identify placement of label string in Stateflow transition.

Passed

All Stateflow transitions are placed uniformly.

✓ Check Stateflow chart action language

Check if the action language of Stateflow charts is set to 'C'.

Passed

All Stateflow Charts have action language set to 'C'.

✓ Check character usage in Stateflow data names

Identify Stateflow data names with invalid characters.

Passed

No invalid characters are used in Stateflow data names.

✓ Check length of Stateflow data name

Check if the length of Stateflow data names are within limit.

Passed

All Stateflow data names are valid.

✓ Check usage of transitions to external states

Identify transitions ending on external child states.

Passed

No direct transitions found from external state to child state.

✓ Check order of state action types

Identify out of order state action types in Stateflow states.

Passed

No Stateflow states found with out of order state action types

✓ Check usage of numeric literals in Stateflow

Identify use of numeric literals in Stateflow states and transitions.

Passed

No numeric literals found in Stateflow charts.

✓ Check position of comments in transition labels

Identify comments in transition labels that are not positioned uniformly.

Passed

Comments in transition labels are positioned uniformly.

✓ Check terminal junctions in Stateflow

Identify usage of terminal junctions in flow charts.

Passed

Multiple terminal junctions were not found.

✗ Check for implicit type casting in Stateflow

Not Run

✓ Check usage of graphical functions in Stateflow

Check for calls between graphical functions.

Passed

No calls between graphical functions were found.

✓ Check if state action type 'exit' is used in the model

Check if state action type 'exit' is used in the model.

Passed

State action type 'exit' is not used in the model.

✗ Check for use of C-style comment symbols

Not Run

✓ Check usage of unconditional transitions in flow charts

Identify unconditional transitions in flow charts.

Passed

All unconditional transitions adhere to the guideline.

✓ Check for comments in unconditional transitions

Identify comments in unconditional transitions without action statements.

Passed

All unconditional transitions without action statements have comments.

✓ Check definition of Stateflow events

Stateflow events should be defined at the smallest possible scope of usage.

Passed

All Stateflow events are defined at their smallest scope.

✓ Check Stateflow transition appearance

Identify Stateflow transitions visually overlapping other Stateflow objects.

Passed

No transition violates the guidelines for Stateflow transition appearance.

✓ Check usage of events in Stateflow charts

Identify undirected event broadcasts in Stateflow.

Passed

No instances of undirected event broadcast were found.

✓ Check usage of Simulink functions in Stateflow

Usage of Simulink Functions in Stateflow.

Passed

All Simulink Functions in Stateflow are defined according to the guideline.

✓ Check for exclusive states in state machines

Identify states which are the only substate within a state with OR(exclusive) type decomposition.

Passed

All states with OR(exclusive) type decomposition have more than one substate.

❑ Check usage of floating-point expressions in Stateflow charts

Not Run

❑ 2.30.6 MATLAB Functions 

✓ Check input and output settings of MATLAB Functions

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

Passed

No MATLAB Functions found in the model or subsystem.

✓ Check MATLAB code for global variables

Check for global variables in MATLAB code

Check for global variables in MATLAB code used in MATLAB Function blocks

Passed

No MATLAB Function blocks found

Check for global variables in MATLAB functions defined in Stateflow charts

Passed

No MATLAB functions defined in Stateflow charts found

Check for global variables in called MATLAB functions

Passed

No external MATLAB functions found

✓ Check usage of character vector inside MATLAB Function block

Identify usage of strings in MATLAB Function blocks.

Passed

No character vectors found in MATLAB Function block

❑ Check usage of enumerated values

Not Run

❑ 2.31 Simulink Code Inspector compatibility checks 

✗ Check code generation settings

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

✗ Check data import and export settings

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☒ Check diagnostic settings

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☒ Check hardware implementation settings

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☒ Check math and data types settings

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☒ Check solver settings

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☒ Check for unconnected objects in the model

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☒ Check system target file setting

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☒ Check function specification setting

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☐ Check for usage of fixed-point instrumentation

Not Run

☒ Check for unsupported blocks

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

☐ Check storage class for workspace variables

Not Run

☐ Check GetSet storage class for workspace variables

Not Run

☐ Check for sample times in the model

Not Run

☐ Check usage of Sources blocks

Not Run

☐ Check usage of Signal Routing blocks

Not Run

☐ Check usage of Math Operations blocks

Not Run

☐ Check usage of Signal Attributes blocks

Not Run

☐ Check usage of Logical and Bit Operations blocks

Not Run

Check usage of Lookup Tables blocksNot Run

Check usage of User-Defined Function blocksNot Run

Check usage of Ports and Subsystems blocksNot Run

Check usage of Discontinuities blocksNot Run

Check usage of Sinks blocksNot Run

Check usage of Discrete blocksNot Run

Check usage of root Outport blocksNot Run

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

Check usage of busesNot Run

Check for usage of synthesized local data storesNot Run

Check usage of global data storesNot Run

Check global data stores' name shadowNot Run

Check conditional input branch execution settingNot Run

Check usage of Stateflow blocksNot Run

Check for Stateflow machine data

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Check for Stateflow machine events

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Check usage of Stateflow chartsNot Run

Check usage of Stateflow data

Not Run

Check usage of Stateflow eventsNot Run

Check usage of Stateflow statesNot Run

Check usage of Stateflow junctionsNot Run

Check usage of Stateflow transitionsNot Run

Check usage of Stateflow graphical functionsNot Run

Check usage of Stateflow truth tablesNot Run

Check Loop unrolling threshold settingNot Run

Check destinations of If and Switchcase blocksNot Run

Check for root Outport blocks that have non-auto storage classNot Run

Check for Terminator blocks that connect to Model block outportsNot Run

Check for unsupported propagation of initial condition valuesNot Run

Check data type replacement namesNot Run

Check usage of MATLAB Function BlocksNot Run

Check usage of Data in MATLAB FunctionsNot Run

Check usage of Code in MATLAB Functions

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Check MATLAB Code Analyzer messages

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Check for multiple sample times in model used as a model reference targetNot Run

Check Treat each discrete rate as a separate task setting

Not Run

Check model for commented out blocks

Not Run

Check model for void_void subsystems that use the same function name

Not Run

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

Not Run

Check model for reusable subsystems that use the same function interfaces

Not Run

Check for usage of shared synthesized local data stores

Not Run

Check the code generation folder structure for the model

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Check for unsupported Code Mapping settings

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Check model for compiled and graphical block sorted order

Not Run

Check usage of String blocks

Not Run

Check usage of shared utilities

Not Run

Check model arguments for storage classes

Supported compiler not detected. You can install the freely available MinGW-w64 C/C++ compiler; see [Install MinGW-w64 Compiler](#). For more options, visit <https://www.mathworks.com/support/compilers>.

Check usage of Stateflow MATLAB action language

Not Run

2.32 Frequency Response Estimation 

Identify time-varying source blocks interfering with frequency response estimation

Not Run

2.33 Simulink Design Verifier Compatibility Check 

Check compatibility with Simulink Design Verifier

Not Run

2.34 Simulink Design Verifier Design Error Checks 

Detect Dead Logic

Not Run

Detect Out Of Bound Array AccessNot Run

Detect Division By ZeroNot Run

Detect Integer OverflowNot Run

Detect Non-finite and NaN Floating-point ValuesNot Run

Detect Subnormal Floating-point ValuesNot Run

Detect Specified Minimum and Maximum Value ViolationsNot Run

Detect Data Store Access ViolationsNot Run

Detect Block Input Range ViolationsNot Run

Detect Usage of remainder and reciprocal operations - hisl_0002Not Run

Detect Usage of square root operations - hisl_0003Not Run

Detect Usage of log and log10 operations - hisl_0004Not Run

Detect Usage of Reciprocal Square Root Blocks - hisl_0028Not Run

2.35 Requirements Consistency Checking **Identify requirement links with missing documents**Passed

Identify requirement links that specify invalid locations within documentsPassed

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

Identify requirement links with path type inconsistent with preferences

Passed