**Model Advisor Report –** Radar\_Acc\_ExtSen\_CS2018\_radar\_acc.mdl

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| --- | --- |
| **Simulink version:** 9.1 | **Model version:**  1.11 |
| **System:** Radar\_Acc\_ExtSen\_CS2018\_radar\_acc/ACC Classical | **Current run:** 2020/07/20 11:56:45 |
| **Treat as Referenced Model:** off | 6 items with a timestamp different than 2020/07/20 11:56:45 |

**Run Summary**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pass** | | **Fail** | | **Warning** | | **Not Run** | | **Total** |
|  | 7 |  | 0 |  | 0 |  | 6 | 13 |

# Modeling Standards for MISRA C:2012

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## Check configuration parameters for MISRA C:2012

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

**Passed**

All constraints on model configuration parameters have been met.

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| --- | --- | --- | --- | --- |
| **Status** | **Parameter** | **Current Value** | **Recommended Values** | **Prerequisites** |
| Pass | [Model Verification block enabling (AssertControl)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20AssertControl) | DisableAll | DisableAll |  |
| D - Pass | [Shared code placement (UtilityFuncGeneration)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20UtilityFuncGeneration) | Shared location | Shared location |  |
| Pass | [Generate shared constants (GenerateSharedConstants)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20GenerateSharedConstants) | off | off | UtilityFuncGeneration |
| D - Pass | [System target file (SystemTargetFile)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20SystemTargetFile) | ERT based target | ERT based target |  |
| Pass | [non-finite numbers (SupportNonFinite)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20SupportNonFinite) | off | off | SystemTargetFile |
| Pass | [continuous time (SupportContinuousTime)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20SupportContinuousTime) | off | off | SystemTargetFile |
| Pass | [non-inlined S-functions (SupportNonInlinedSFcns)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20SupportNonInlinedSFcns) | off | off | SystemTargetFile |
| Pass | [MAT-file logging (MatFileLogging)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20MatFileLogging) | off | off | SystemTargetFile |
| Pass | [Code replacement library (CodeReplacementLibrary)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20CodeReplacementLibrary) | None | None, AUTOSAR 4.0 | SystemTargetFile |
| Pass | [Parentheses level (ParenthesesLevel)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20ParenthesesLevel) | Maximum | Maximum | SystemTargetFile |
| Pass | [Casting modes (CastingMode)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20CastingMode) | Standards | Standards | SystemTargetFile |
| Pass | [System-generated identifiers (InternalIdentifier)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20InternalIdentifier) | Shortened | Shortened | SystemTargetFile |
| Pass | [Signed integer division rounds to (ProdIntDivRoundTo)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20ProdIntDivRoundTo) | Zero | Zero, Floor |  |
| Pass | [Use division for fixed-point net slope computation (UseDivisionForNetSlopeComputation)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20UseDivisionForNetSlopeComputation) | on | on, UseDivisionForReciprocalsOfIntegersOnly |  |
| Pass | [Replace multiplications by powers of two with signed bitwise shifts (EnableSignedLeftShifts)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20EnableSignedLeftShifts) | off | off | SystemTargetFile |
| Pass | [Allow right shifts on signed integers (EnableSignedRightShifts)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20EnableSignedRightShifts) | off | off | SystemTargetFile |
| Pass | [Wrap on overflow (IntegerOverflowMsg)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20IntegerOverflowMsg) | warning | warning, error |  |
| Pass | [Inf or NaN block output (SignalInfNanChecking)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20SignalInfNanChecking) | error | warning, error |  |
| Pass | [Dynamic memory allocation in MATLAB functions (MATLABDynamicMemAlloc)](matlab:%20modeladvisorprivate%20openCSAndHighlight%20Radar_Acc_ExtSen_CS2018_rev%20MATLABDynamicMemAlloc) | off | off |  |

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## Check for blocks not recommended for C/C++ production code deployment (2020/07/20 11:52:50)

Identify blocks not supported by code generation or not recommended for C/C++ production code deployment.  
  
 **Passed**   
Blocks not recommended for C/C++ production code deployment were not found in the model or subsystem.

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## Check for blocks not recommended for MISRA C:2012 (2020/07/20 11:52:50)

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

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## Check for unsupported block names (2020/07/20 11:52:50)

Identify block names containing "/".  
  
 **Passed**   
No unsupported block names found.

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## Check usage of Assignment blocks (2020/07/20 11:52:50)

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

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

**Passed**

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

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## Check for switch case expressions without a default case (2020/07/20 11:52:50)

Identify switch case expressions that do not have a default case.  
  
 **Passed**   
All switch case expressions have default cases.

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## Check for missing error ports in AUTOSAR receiver interfaces (2020/07/20 11:52:50)

Identify AUTOSAR receiver interface ports that do not have a matching error port.  
  
 **Passed**   
Model is not configured as an AUTOSAR target.

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## Check for bitwise operations on signed integers

Not Run

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## Check for recursive function calls

Not Run

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

Not Run

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## Check for missing const qualifiers in model functions

Not Run

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## Check integer word lengths

Not Run

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## Check bus object names that are used as bus element names

Not Run