# Model Advisor Report –

# ModelAdvisor\_Headlight\_Model.slx

Simulink version: 9.1 Model version: 1.9

System: ModelAdvisor\_Headlight\_Model Current run: 04-Sep-2021 15:24:12

Treat as Referenced Model: off

# **Run Summary**

Pass Fail Warning Not Run Total

✓ 13 🔞 0 13 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.

Stat	Parameter	Current Value	Recommended Values	Prerequisites
Pass	Model Verification block enabling (AssertControl)	Disable All	DisableAll	
D - Pass	Shared code placement (UtilityFuncGeneration)	Shared location	Shared location	

Pass	Generate shared constants	off	off	
	(GenerateSharedConstants)			UtilityFuncGener ation
D -	System target file	ERT	ERT based target	
Pass	(SystemTargetFile)	based target		
Pass	non-finite numbers (SupportNonFinite)	off	off	SystemTargetFile
Pass	continuous time (SupportContinuousTime)	off	off	SystemTargetFile
Pass	non-inlined S-functions (SupportNonInlinedSFcns)	off	off	SystemTargetFile
Pass	MAT-file logging (MatFileLogging)	off	off	SystemTargetFile
Pass	Code replacement library (CodeReplacementLibrary)	None	None, AUTOSAR 4.0	SystemTargetFile
Pass	Parentheses level	Marrina	Maximum	Custom TownstFile
	(ParenthesesLevel)	Maxim um		SystemTargetFile
Pass	Casting modes		Standards	
	(CastingMode)	Standar ds		SystemTargetFile
Pass	System-generated identifiers	Chautan	Shortened	Custom Towart File
	(InternalIdentifier)	Shorten ed		SystemTargetFile
Pass	Signed integer division	Zero	Zero, Floor	
	rounds to (ProdIntDivRoundTo)			
Pass	Use division for fixed-point net slope computation	on	on, UseDivisionForReciprocalsOfInt	
	(UseDivisionForNetSlopeCom putation)		egersOnly	
Pass	Replace multiplications by	off	off	
	powers of two with signed			SystemTargetFile

	bitwise shifts (EnableSignedLeftShifts)			
Pass	Allow right shifts on signed integers (EnableSignedRightShifts)	off	off	SystemTargetFile
Pass	Wrap on overflow (IntegerOverflowMsg)	error	warning, error	
Pass	Inf or NaN block output (SignalInfNanChecking)	error	warning, error	
Pass	Dynamic memory allocation in MATLAB functions (MATLABDynamicMemAlloc)	off	off	

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

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

# Passed

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

# Check for blocks not recommended for MISRA C:2012

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

# **Passed**

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

Check for unsupported block names Identify block names containing "/".

#### **Passed**

No unsupported block names found.

# Check usage of Assignment blocks

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

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

#### **Passed**

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

Check for switch case expressions without a default case

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

# **Passed**

All switch case expressions have default cases.

Check for missing error ports in AUTOSAR receiver interfaces

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

# **Passed**

Model is not configured as an AUTOSAR target.

Check for bitwise operations on signed integers

Identify bitwise operations on signed integers.

### **Passed**

No bitwise operations on signed integers found.

Check for recursive function calls

Identify function calls that are recursive.

## **Passed**

No recursive function calls found.

Check for equality and inequality operations on floating-point values

Identify equality and inequality operations on floating-point values.

## **Passed**

No equality or inequality operations on floating-point values found.

Check for missing const qualifiers in model functions

Identify missing const qualifiers in model functions.

## **Passed**

Model does not use customized model functions.

Check integer word lengths

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

#### **Passed**

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

Check bus object names that are used as bus element names

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

#### **Passed**

No bus object names are used as bus element names.