Coverage Report for Eas_Integrated

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Analysis Information

Coverage Data Information

Collected in version	(R2021a)

Model Information

Model version	1.48
Author	Admin
Last saved	Tue Jul 26 23:48:21 2022

Simulation Optimization Options

Default parameter behavior	inlined
Block reduction	off
Conditional branch optimization	on

Coverage Options

Analyzed model	Eas_Integrated
Logic block short circuiting	off

Tests

Test	Started execution	Ended execution
Run 12	27-Jul-2022 22:59:24	27-Jul-2022 22:59:25

Summary

Model Hierarchy/Complexity		Run 12			
		Decision		Execution	
1. Eas_Integrated	19	100%	▬▬	100%	▬▬
2. . . . Eas_Subsystem	18	100%	▬▬	100%	▬▬
3. . . . . . . DPF_Subsystem	6	100%	▬▬	100%	▬▬
4. . . . . Auto_Regeneration	1	NA		100%	▬▬
5. . . . . Manual_Regn_Subsystem	2	100%	▬▬	100%	▬▬
6. . . . . Post_Regn_Subsystem	2	100%	▬▬	100%	▬▬
7. . . . . Regn_Display_Subsystem		NA		100%	▬▬
8. . . . . Service_Regeneration		NA		100%	▬▬
9. . . . . . . SCR_Regeneration_Subsystem	11	100%	▬▬	100%	▬▬
10. . . . . Adblue_Injection_System	2	100%	▬▬	100%	▬▬
11. . . . . Adblue_Level2	2	100%	▬▬	100%	▬▬
12. . . . . Scr_Regeneration_Parameter	6	100%	▬▬	100%	▬▬
13. . . . . Adblue_Level_indication	2	100%	▬▬	100%	▬▬
14. . . . . Adblue_Quality_indication	1	NA		100%	▬▬
15. . . . . Scr_temp_indication	2	100%	▬▬	100%	▬▬

Details

1. Model "Eas_Integrated"

Child Systems: Eas_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	19
Decision	NA	100% (12/12) decision outcomes
Execution	NA	100% (82/82) objective outcomes

Full Coverage

Model Object	Metric
DataTypeConversion block "Data Type Conversion"	Execution
DataTypeConversion block "Data Type Conversion1"	Execution
DataTypeConversion block "Data Type Conversion2"	Execution

2. SubSystem block "Eas_Subsystem"

Justify or Exclude

Parent: /Eas_Integrated

Child Systems:	DPF_Subsystem, SCR_Regeneration_Subsystem	

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	18
Decision	NA	100% (12/12) decision outcomes
Execution	NA	100% (79/79) objective outcomes

3. SubSystem block "DPF_Subsystem"

Justify or Exclude

Parent:	Eas_Integrated/Eas_Subsystem
Child Systems:	Auto_Regeneration, Manual_Regn_Subsystem, Post_Regn_Subsystem, Regn_Display_Subsystem, Service_Regeneration

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	6
Decision	NA	100% (4/4) decision outcomes
Execution	NA	100% (48/48) objective outcomes

4. SubSystem block "Auto_Regeneration"

Justify or Exclude

Parent:	Eas_Integrated/Eas_Subsystem/DPF_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (14/14) objective outcomes

Full Coverage

Model Object	Metric
Logic block "AND"	Execution
Logic block "AND1"	Execution
Logic block "AND2"	Execution
Logic block "AND3"	Execution
RelationalOperator block "Relational_Operator"	Execution
RelationalOperator block "Relational_Operator1"	Execution
RelationalOperator block "Relational_Operator2"	Execution
RelationalOperator block "Relational_Operator3"	Execution

RelationalOperator block "Relational_Operator4"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution
Constant block "Constant2"	Execution
Constant block "Constant3"	Execution
Constant block "Constant4"	Execution

5. SubSystem block "Manual_Regn_Subsystem"

Justify or Exclude

Parent: Eas_Integrated/Eas_Subsystem/DPF_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	2	2
Decision	100% (2/2) decision outcomes	100% (2/2) decision outcomes
Execution	NA	100% (7/7) objective outcomes

Decisions analyzed

enable logical value	100%
false	109/151
true	42/151

Full Coverage

Model Object	Metric
Logic block "AND"	Execution
RelationalOperator block "Relational_Operator"	Execution
RelationalOperator block "Relational_Operator1"	Execution
RelationalOperator block "Relational_Operator2"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution
Constant block "Constant2"	Execution

6. SubSystem block "Post_Regn_Subsystem"

Justify or Exclude

Parent: Eas_Integrated/Eas_Subsystem/DPF_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	2	2
Decision	100% (2/2) decision outcomes	100% (2/2) decision outcomes
Execution	NA	100% (20/20) objective outcomes

Decisions analyzed

enable logical value	100%
false	34/151
true	117/151

Full Coverage

Model Object	Metric
Logic block "AND"	Execution
Logic block "AND1"	Execution
Logic block "AND2"	Execution
Logic block "AND3"	Execution
RelationalOperator block "Relational_Operator"	Execution
RelationalOperator block "Relational_Operator1"	Execution
RelationalOperator block "Relational_Operator2"	Execution
RelationalOperator block "Relational_Operator3"	Execution
RelationalOperator block "Relational_Operator4"	Execution
RelationalOperator block "Relational_Operator5"	Execution
RelationalOperator block "Relational_Operator6"	Execution
RelationalOperator block "Relational_Operator7"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution
Constant block "Constant2"	Execution
Constant block "Constant3"	Execution
Constant block "Constant4"	Execution
Constant block "Constant5"	Execution
Constant block "Constant6"	Execution
Constant block "Constant7"	Execution

7. SubSystem block "Regn_Display_Subsystem"

Justify or Exclude

Parent: Eas_Integrated/Eas_Subsystem/DPF_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (5/5) objective outcomes

Full Coverage

Model Object	Metric
Logic block "AND"	Execution
RelationalOperator block "Relational_Operator"	Execution
RelationalOperator block "Relational_Operator1"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution

8. SubSystem block "Service_Regeneration"

Justify or Exclude

Parent: Eas_Integrated/Eas_Subsystem/DPF_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	0	0
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
RelationalOperator block "Relational_Operator3"	Execution
Constant block "Constant3"	Execution

9. SubSystem block "SCR_Regeneration_Subsystem"

Justify or Exclude

Parent: Eas_Integrated/Eas_Subsystem
Child Systems: Adblue_Injection_System, Adblue_Level2, Scr_Regeneration_Parameter

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	11
Decision	NA	100% (8/8) decision outcomes
Execution	NA	100% (31/31) objective outcomes

10. SubSystem block "Adblue_Injection_System"

Justify or Exclude

Parent: Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	2	2
Decision	100% (2/2) decision outcomes	100% (2/2) decision outcomes
Execution	NA	100% (11/11) objective outcomes

Decisions analyzed

enable logical value	100%
false	101/151
true	50/151

Full Coverage

Model Object	Metric
Gain block "Gain"	Execution
Gain block "Gain1"	Execution
Product block "Divide"	Execution
Product block "Product"	Execution
Product block "Product1"	Execution
Product block "Product2"	Execution
Sqrt block "Square_Root"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution
Constant block "Constant2"	Execution
Constant block "Constant3"	Execution

11. SubSystem block "Adblue_Level2"

Parent: Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	2
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (3/3) objective outcomes

Full Coverage

Model Object	Metric
Switch block "Switch2"	Decision, Execution
RelationalOperator block "Relational_Operator1"	Execution
Constant block "Tank_Condition"	Execution

12. SubSystem block "Scr_Regeneration_Parameter"

Parent: Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem
Child Systems: Adblue_Level_indication, Adblue_Quality_indication, Scr_temp_indication

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	6
Decision	NA	100% (4/4) decision outcomes
Execution	NA	100% (17/17) objective outcomes

Full Coverage

Model Object	Metric
Logic block "AND"	Execution
Logic block "AND2"	Execution

13. SubSystem block "Adblue_Level_indication"

Parent: Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	2
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (5/5) objective outcomes

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
RelationalOperator block "Relational_Operator1"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution
Constant block "Constant2"	Execution

14. SubSystem block "Adblue_Quality_indication"

Parent: Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Execution	NA	100% (5/5) objective outcomes

Full Coverage

Model Object	Metric
Logic block "AND"	Execution
RelationalOperator block "Relational_Operator"	Execution
RelationalOperator block "Relational_Operator1"	Execution
Constant block "Constant"	Execution
Constant block "Constant1"	Execution

15. SubSystem block "Scr_temp_indication"

Parent: Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	2
Decision	NA	100% (2/2) decision outcomes
Execution	NA	100% (5/5) objective outcomes

Full Coverage

Model Object	Metric
Switch block "Switch"	Decision, Execution
RelationalOperator block "Relational_Operator"	Execution
Constant block "Constant1"	Execution
Constant block "Constant2"	Execution
Constant block "scr_temp"	Execution