

Coverage Report for Eas_Integrated

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Analysis Information

Coverage Data Information

Collected in version (R2021a)

Model Information

Model version 1.49
Author Admin
Last saved Wed Jul 27 23:23:52 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
MCDC mode masking



















































Tests

Test	Started execution	Ended execution
Run 27	27-Jul-2022 23:24:40	27-Jul-2022 23:24:40

Summary

Model Hierarchy/Complexity

Run 27

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

Details

1. Model "Eas_Integrated"

Child Systems: [Eas_Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	19
Condition	NA	100% (102/102) condition outcomes
Decision	NA	100% (12/12) decision outcomes
MCDC	NA	100% (23/23) conditions reversed the outcome
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
Condition	NA	100% (102/102) condition outcomes
Decision	NA	100% (12/12) decision outcomes
MCDC	NA	100% (23/23) conditions reversed the outcome
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
Condition	NA	100% (80/80) condition outcomes
Decision	NA	100% (4/4) decision outcomes
MCDC	NA	100% (18/18) conditions reversed the outcome
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
Condition	NA	100% (26/26) condition outcomes
MCDC	NA	100% (5/5) conditions reversed the outcome
Execution	NA	100% (14/14) objective outcomes

Logic block "[AND1](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/DPF_Subsystem/Auto_Regeneration](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see AND
Execution	100% (1/1) objective outcomes

Logic block "[AND2](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/DPF_Subsystem/Auto_Regeneration](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see AND
Execution	100% (1/1) objective outcomes

Logic block "[AND3](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/DPF_Subsystem/Auto_Regeneration](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see AND
Execution	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Logic block " AND "	Condition, MCDC, Execution
RelationalOperator block " Relational_Operator "	Condition, Execution
RelationalOperator block " Relational_Operator1 "	Condition, Execution
RelationalOperator block " Relational_Operator2 "	Condition, Execution
RelationalOperator block " Relational_Operator3 "	Condition, Execution
RelationalOperator block " Relational_Operator4 "	Condition, 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
Condition	NA	100% (12/12) condition outcomes
Decision	100% (2/2) decision outcomes	100% (2/2) decision outcomes
MCDC	NA	100% (3/3) conditions reversed the outcome
Execution	NA	100% (7/7) objective outcomes

Decisions analyzed

enable logical value	100%
false	115/151
true	36/151

Full Coverage

Model Object	Metric
Logic block " AND "	Condition, MCDC, Execution
RelationalOperator block " Relational_Operator "	Condition, Execution
RelationalOperator block " Relational_Operator1 "	Condition, Execution
RelationalOperator block " Relational_Operator2 "	Condition, 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
Condition	NA	100% (32/32) condition outcomes
Decision	100% (2/2) decision outcomes	100% (2/2) decision outcomes
MCDC	NA	100% (8/8) conditions reversed the outcome
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 "	Condition, MCDC, Execution
Logic block " AND1 "	Condition, MCDC, Execution
Logic block " AND2 "	Condition, MCDC, Execution
Logic block " AND3 "	Condition, MCDC, Execution
RelationalOperator block " Relational_Operator "	Condition, Execution
RelationalOperator block " Relational_Operator1 "	Condition, Execution
RelationalOperator block " Relational_Operator2 "	Condition, Execution
RelationalOperator block " Relational_Operator3 "	Condition, Execution
RelationalOperator block " Relational_Operator4 "	Condition, Execution
RelationalOperator block " Relational_Operator5 "	Condition, Execution
RelationalOperator block " Relational_Operator6 "	Condition, Execution
RelationalOperator block " Relational_Operator7 "	Condition, 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
Condition	NA	100% (8/8) condition outcomes
MCDC	NA	100% (2/2) conditions reversed the outcome
Execution	NA	100% (5/5) objective outcomes

Full Coverage

Model Object	Metric
Logic block " AND "	Condition, MCDC, Execution
RelationalOperator block " Relational_Operator "	Condition, Execution
RelationalOperator block " Relational_Operator1 "	Condition, 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
Condition	NA	100% (2/2) condition outcomes
Execution	NA	100% (2/2) objective outcomes

Full Coverage

Model Object	Metric
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RelationalOperator block "[Relational_Operator3](#)" Condition, 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
Condition	NA	100% (22/22) condition outcomes
Decision	NA	100% (8/8) decision outcomes
MCDC	NA	100% (5/5) conditions reversed the outcome
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](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	2
Condition	NA	100% (2/2) condition outcomes
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 "	Condition, Execution
Constant block " Tank_Condition "	Execution

12. SubSystem block "[Scr_Regeneration_Parameter](#)"

[Justify or Exclude](#)

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
Condition	NA	100% (20/20) condition outcomes
Decision	NA	100% (4/4) decision outcomes
MCDC	NA	100% (5/5) conditions reversed the

Execution	NA	outcome 100% (17/17) objective outcomes
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Logic block "[AND2](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter](#)

Metric	Coverage
Cyclomatic Complexity	0
Condition	100% (4/4) condition outcomes
MCDC	see AND
Execution	100% (1/1) objective outcomes

Full Coverage

Model Object	Metric
Logic block " AND "	Condition, MCDC, Execution

13. SubSystem block "[Adblue_Level_indication](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	2
Condition	NA	100% (2/2) condition outcomes
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 "	Condition, Execution
Constant block " Constant "	Execution
Constant block " Constant1 "	Execution
Constant block " Constant2 "	Execution

14. SubSystem block "[Adblue_Quality_indication](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	1
Condition	NA	100% (8/8) condition outcomes
MCDC	NA	100% (2/2) conditions reversed the outcome
Execution	NA	100% (5/5) objective outcomes

Full Coverage

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

15. SubSystem block "[Scr_temp_indication](#)"

[Justify or Exclude](#)

Parent: [Eas_Integrated/Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter](#)

Metric	Coverage (this object)	Coverage (inc. descendants)
Cyclomatic Complexity	1	2
Condition	NA	100% (2/2) condition outcomes
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 "	Condition, Execution

Constant block "[Constant1](#)"

Execution

Constant block "[Constant2](#)"

Execution

Constant block "[scr_temp](#)"

Execution