Simulink Design Verifier Report

Eas_Integrated/Eas_Subsystem SOMNATH



Publication date 29-Jul-2022 22:07:39

Table of Contents

| 1. Summary | 1 |
|---|---|
| 2. Analysis Information | |
| Model Information | |
| Analysis Options | |
| 3. Design Érror Detection Objectives Status | |
| Objectives Valid | |
| Active Logic | |
| 4. Derived Ranges | |

Chapter 1. Summary

Analysis Information.

Model: Eas_Integrated

Release: R2021a

Analyzed Subsystem: Eas_Integrated/Eas_Subsystem

Checksum: 2364402400 1502429244 1830922972 2321936094

Mode: Design error detection

Model Representation: Built on 29-Jul-2022 22:05:56

Status: Completed normally

PreProcessing Time: 47s Analysis Time: 36s

Objectives Status.

Number of Objectives: 115

Objectives Valid: 1 (1%)
Active Logic: 114 (99%)

Chapter 2. Analysis Information

Table of Contents

| Model Information | . 2 |
|-------------------|-----|
| Analysis Options | . 2 |

Model Information

File: Eas_Integrated

Version: 1.54

Time Stamp: Thu Jul 28 22:48:44 2022

Author: Admin

Analysis Options

Mode: DesignErrorDetection
Rebuild Model Representation: IfChangeIsDetected

Detect dead logic (partial): on Run exhaustive analysis for dead log-on

ic:

Detect integer overflow: on

Detect division by zero: on

Detect specified minimum and maxi- off

mum value violations:

Detect out of bound array access: on

Detect non-finite and NaN floating- off

point values:

Detect subnormal floating-point val-

ues:

Detect data store access violations: off Detect specified block input range vio- off

lations:

Detect usage of Math Function blocks off with rem and reciprocal functions

(hisl 0002):

Detect usage of Square Root blocks

(hisl_0003):

Detect usage of Math Function blocks with log and log10 functions

(hisl_0004):

off

off

Analysis Information

| Detect usage of Reciprocal Square Root blocks (hisl_0028): | off |
|--|------|
| Maximum Analysis Time: | 300s |
| Block Replacement: | off |
| Parameters Analysis: | off |
| Include expected output values: | on |
| Randomize data that do not affect the outcome: | on |
| Additional analysis to reduce instances of rational approximation: | on |
| Save Data: | on |
| Save Harness: | on |
| Save Report: | off |

Chapter 3. Design Error Detection Objectives Status

Table of Contents

| Objectives Valid | 4 |
|------------------|---|
| Active Logic | 4 |

Objectives Valid

| # | Туре | Model Item | Description | Analysis Time (sec) |
|-----|------|---|------------------|---------------------------|
| 197 | | Eas_Subsystem/SCR_Regener- ation_Subsystem/Adblue_In- jection_System/Divide | Division by zero | 15 |

Active Logic

Simulink Design Verifier found that these decision and condition outcomes can occur.

| # | Туре | Model Item | Description | Analysis Time (sec) |
|----|----------------|--|---|---------------------------|
| 9 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator | RelationalOperator: input1 >= input2 true | 32 |
| 10 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator | RelationalOperator: input1 >= input2 false | 32 |
| 12 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator1 | RelationalOperator: input1 >= input2 true | 32 |
| 13 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator1 | RelationalOperator: input1 >= input2 false | 32 |
| 15 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator2 | RelationalOperator: input1 >= input2 true | 32 |
| 16 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator2 | RelationalOperator: input1 >= input2 false | 32 |

| # | Туре | Model Item | Description | Analysis Time (sec) |
|----|----------------|--|---|---------------------------|
| 18 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND1 | Logic: input port 1 true | 32 |
| 19 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND1 | Logic: input port 1 false | 32 |
| 20 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND1 | Logic: input port 2 true | 32 |
| 21 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND1 | Logic: input port 2 false | 32 |
| 23 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator3 | RelationalOperator: input1 >= input2 true | 32 |
| 24 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator3 | RelationalOperator: input1 >= input2 false | 32 |
| 26 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator4 | RelationalOperator: input1 >= input2 true | 32 |
| 27 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relational_Operator4 | RelationalOperator: input1 >= input2 false | 32 |
| 29 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND2 | Logic: input port 1 true | 32 |
| 30 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND2 | Logic: input port 1 false | 32 |
| 31 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND2 | Logic: input port 2 true | 32 |
| 32 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND2 | Logic: input port 2 false | 32 |
| 34 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND3 | Logic: input port 1 true | 32 |
| 35 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND3 | Logic: input port 1 false | 32 |
| 36 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND3 | Logic: input port 2 true | 32 |
| 37 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND3 | Logic: input port 2 false | 32 |
| 39 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND | Logic: input port 1 true | 32 |
| 40 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND | Logic: input port 1 false | 32 |
| 41 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND | Logic: input port 2 true | 32 |

| # | Type | Model Item | Description | Analysis Time (sec) |
|----|----------------|---|---|---------------------------|
| 42 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND | Logic: input port 2 false | 32 |
| 44 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Relational_Operator | RelationalOperator: input1 >= input2 true | 32 |
| 45 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Relational_Operator | RelationalOperator: input1 >= input2 false | 32 |
| 47 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Relational_Operator1 | RelationalOperator: input1 >= input2 true | 32 |
| 48 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Relational_Operator1 | RelationalOperator: input1 >= input2 false | 32 |
| 50 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/AND | Logic: input port 1 true | 32 |
| 51 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/AND | Logic: input port 1 false | 32 |
| 52 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/AND | Logic: input port 2 true | 32 |
| 53 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/AND | Logic: input port 2 false | 32 |
| 55 | Decision | Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem | enable logical value true | 32 |
| 56 | Decision | Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem | enable logical value false | 32 |
| 60 | Decision | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem | enable logical value true | 32 |
| 61 | Decision | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem | enable logical value false | 32 |
| 62 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/Relational_Operator | RelationalOperator: input1 == input2 true | 32 |
| 63 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/Relational_Operator | RelationalOperator: input1 == input2 false | 32 |
| 67 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Service_Regeneration/Relational_Operator3 | RelationalOperator: input1 >= input2 true | 32 |

| # | Туре | Model Item | Description | Analysis Time (sec) |
|----|----------------|--|---|---------------------------|
| 68 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Service_Regeneration/Re- lational_Operator3 | RelationalOperator: input1 >= input2 false | 32 |
| 71 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/Relational_Operator1 | RelationalOperator: input1 == input2 true | 32 |
| 72 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Relational_Operator1 | RelationalOperator: input1 == input2 false | 32 |
| 79 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Relational_Operator2 | RelationalOperator: input1 == input2 true | 32 |
| 80 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/Relational_Operator2 | RelationalOperator: input1 == input2 false | 32 |
| 85 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/AND | Logic: input port 1 true | 32 |
| 86 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/AND | Logic: input port 1 false | 32 |
| 87 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/AND | Logic: input port 2 true | 32 |
| 88 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/AND | Logic: input port 2 false | 32 |
| 89 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/AND | Logic: input port 3 true | 32 |
| 90 | Condi- tion | Eas_Subsystem/DPF_Subsys- tem/Manual_Regn_Subsys- tem/AND | Logic: input port 3 false | 32 |
| 92 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Relational_Operator1 | RelationalOperator: input1 >= input2 true | 32 |
| 93 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Relational_Operator1 | RelationalOperator: input1 >= input2 false | 32 |

| # | Туре | Model Item | Description | Analysis Time (sec) |
|-----|----------------|---|---|---------------------------|
| 95 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator | RelationalOperator: input1 >= input2 true | 32 |
| 96 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator | RelationalOperator: input1 >= input2 false | 32 |
| 98 | Decision | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Switch | logical trigger input false (output is from 3rd input port) | 32 |
| 99 | Decision | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Switch | logical trigger input true (output is from 1st input port) | 32 |
| 101 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator1 | RelationalOperator: input1 <= input2 true | 32 |
| 102 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator1 | RelationalOperator: input1 <= input2 false | 32 |
| 105 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND | Logic: input port 1 true | 32 |
| 106 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND | Logic: input port 1 false | 32 |
| 107 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND | Logic: input port 2 true | 32 |
| 108 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND | Logic: input port 2 false | 32 |
| 112 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator2 | RelationalOperator: input1 >= input2 true | 32 |
| 113 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator2 | RelationalOperator: input1 >= input2 false | 32 |
| 115 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/Relational_Operator | RelationalOperator: input1 >= input2 true | 32 |
| 116 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Re- | RelationalOperator: input1 >= input2 false | 32 |

| # | Туре | Model Item | Description | Analysis Time (sec) |
|-----|----------------|--|---|---------------------------|
| | | generation_Parame- ter/Scr_temp_indication/Rela- tional_Operator | | |
| 118 | Decision | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/Switch | logical trigger input false (output is from 3rd input port) | 32 |
| 119 | Decision | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/Switch | logical trigger input true (output is from 1st input port) | 32 |
| 121 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator3 | RelationalOperator: input1 <= input2 true | 32 |
| 122 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator3 | RelationalOperator: input1 <= input2 false | 32 |
| 124 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND1 | Logic: input port 1 true | 32 |
| 125 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND1 | Logic: input port 1 false | 32 |
| 126 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND1 | Logic: input port 2 true | 32 |
| 127 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND1 | Logic: input port 2 false | 32 |
| 129 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Scr_Regen- eration_Parameter/AND2 | Logic: input port 1 true | 32 |
| 130 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/AND2 | Logic: input port 1 false | 32 |
| 131 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Scr_Regen- eration_Parameter/AND2 | Logic: input port 2 true | 32 |
| 132 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Scr_Regen- eration_Parameter/AND2 | Logic: input port 2 false | 32 |

| # | Туре | Model Item | Description | Analysis Time (sec) |
|-----|----------------|--|---|---------------------------|
| 134 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator4 | RelationalOperator: input1 >= input2 true | 32 |
| 135 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator4 | RelationalOperator: input1 >= input2 false | 32 |
| 139 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator5 | RelationalOperator: input1 <= input2 true | 32 |
| 140 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator5 | RelationalOperator: input1 <= input2 false | 32 |
| 142 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Relational_Operator | RelationalOperator: input1 >= input2 true | 32 |
| 143 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Relational_Operator | RelationalOperator: input1 >= input2 false | 32 |
| 145 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND2 | Logic: input port 1 true | 32 |
| 146 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND2 | Logic: input port 1 false | 32 |
| 147 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND2 | Logic: input port 2 true | 32 |
| 148 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND2 | Logic: input port 2 false | 32 |
| 150 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Relational_Operator1 | RelationalOperator: input1 <= input2 true | 32 |
| 151 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Relational_Operator1 | RelationalOperator: input1 <= input2 false | 32 |

| # | Туре | Model Item | Description | Analysis Time (sec) |
|-----|----------------|---|---|---------------------------|
| 153 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator6 | RelationalOperator: input1 >= input2 true | 32 |
| 154 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator6 | RelationalOperator: input1 >= input2 false | 32 |
| 156 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/AND | Logic: input port 1 true | 32 |
| 157 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/AND | Logic: input port 1 false | 32 |
| 158 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/AND | Logic: input port 2 true | 32 |
| 159 | Condi- tion | Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/AND | Logic: input port 2 false | 32 |
| 161 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Scr_Regen- eration_Parameter/AND | Logic: input port 1 true | 32 |
| 162 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Scr_Regen- eration_Parameter/AND | Logic: input port 1 false | 32 |
| 163 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Scr_Regen- eration_Parameter/AND | Logic: input port 2 true | 32 |
| 164 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Scr_Regen- eration_Parameter/AND | Logic: input port 2 false | 32 |
| 166 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator7 | RelationalOperator: input1 <= input2 true | 32 |
| 167 | Condi- tion | Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator7 | RelationalOperator: input1 <= input2 false | 32 |
| 169 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND3 | Logic: input port 1 true | 32 |

| # | Туре | Model Item | Description | Analysis Time (sec) |
|-----|----------------|---|---|---------------------------|
| 170 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND3 | Logic: input port 1 false | 32 |
| 171 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND3 | Logic: input port 2 true | 32 |
| 172 | Condi- tion | Eas_Subsystem/DPF_Sub- system/Post_Regn_Subsys- tem/AND3 | Logic: input port 2 false | 32 |
| 174 | Decision | Eas_Subsystem/SCR_Regener- ation_Subsystem/Adblue_In- jection_System | enable logical value true | 32 |
| 175 | Decision | Eas_Subsystem/SCR_Regener- ation_Subsystem/Adblue_In- jection_System | enable logical value false | 32 |
| 180 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Adblue_Lev- el2/Relational_Operator1 | RelationalOperator: input1 == input2 true | 32 |
| 181 | Condi- tion | Eas_Subsystem/SCR_Regener- ation_Subsystem/Adblue_Lev- el2/Relational_Operator1 | RelationalOperator: input1 == input2 false | 32 |
| 184 | Decision | Eas_Subsystem/SCR_Regener- ation_Subsystem/Adblue_Lev- el2/Switch2 | logical trigger input false (output is from 3rd input port) | 32 |
| 185 | Decision | Eas_Subsystem/SCR_Regener- ation_Subsystem/Adblue_Lev- el2/Switch2 | logical trigger input true (output is from 1st input port) | 32 |

Chapter 4. Derived Ranges

| Signal | Derived Ranges |
|--|----------------|
| Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Constant- Outport 1 | 80 |
| Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Constant1- Outport 1 | 200 |
| Eas_Subsystem/DPF_Subsystem/Service_Regeneration/Constant3- Outport 1 | 95 |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Constant- Outport 1 | 80 |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Constant1-Outport 1 | 55 |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Constant2-Outport 1 | 1500 |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Constant3-Outport 1 | 80 |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Constant4-Outport 1 | 250 |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relation-al_Operator- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relation-al_Operator1- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relation-al_Operator2- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND1- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relation-al_Operator3- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/Relation-al_Operator4- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND2- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND3- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Auto_Regeneration/AND- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Relational_Operator- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/Relational_Operator1- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Regn_Display_Subsystem/AND-Outport 1 | [FT] |

| Signal | Derived Ranges |
|---|----------------|
| Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Constant-Outport 1 | F |
| Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Constant1- Outport 1 | F |
| Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Constant2- Outport 1 | F |
| Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Relational_Operator- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant- Outport 1 | 10 |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant1- Outport 1 | 35 |
| Eas_Subsystem/DPF_Subsystem/Service_Regeneration/Relation-al_Operator3- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant2- Outport 1 | 190 |
| Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Relational_Operator1- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant3- Outport 1 | 215 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Constant- Outport 1 | 20 |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant4- Outport 1 | 370 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Constant1- Outport 1 | F |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant5- Outport 1 | 395 |
| Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/Relational_Operator2- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Constant2- Outport 1 | Т |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant6- Outport 1 | 550 |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Constant7- Outport 1 | 575 |
| Eas_Subsystem/DPF_Subsystem/Manual_Regn_Subsystem/AND-Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Relational_Operator1- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator- Outport 1 | [FT] |

| Signal | Derived Ranges |
|---|----------------|
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Level_indication/Switch- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator1- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/Constant1- Outport 1 | Т |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/AND-Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/Constant2- Outport 1 | F |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/scr_temp- Outport 1 | 200 |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator2- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/Relational_Operator-Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Scr_temp_indication/Switch- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator3- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/AND1-Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/AND2- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator4- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Constant- Outport 1 | 31.8 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Constant1- Outport 1 | 33.2 |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator5- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Relational_Operator-Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/AND2- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/Relational_Operator1- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator6- Outport 1 | [FT] |

| Signal | Derived Ranges |
|--|----------------|
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/Adblue_Quality_indication/AND- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Scr_Regeneration_Parameter/AND- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/Relational_Operator7- Outport 1 | [FT] |
| Eas_Subsystem/DPF_Subsystem/Post_Regn_Subsystem/AND3-Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Constant- Outport 1 | 2 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Level2/Tank_Condition- Outport 1 | F |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Constant1- Outport 1 | 6 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Constant2- Outport 1 | 1.13e-06 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Level2/Relational_Operator1- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Constant3- Outport 1 | 0.099 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Gain- Outport 1 | 6e+05 |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Gain1- Outport 1 | 3.39e-06 |
| Auto_Regeneration_ON- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Product- Outport 1 | 1.2e+06 |
| Press_Regeneration_Button- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Square_Root- Outport 1 | 1095.4 |
| Manual_Regeneration_Start- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Product1- Outport 1 | 0.0037136 |
| Post_Injector2- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Product2- Outport 1 | [0243.37] |
| Post_Injector1- Outport 1 | [FT] |
| Eas_Subsystem/SCR_Regeneration_Subsystem/Adblue_Injection_System/Divide- Outport 1 | [02458.3] |
| Post_Injector4- Outport 1 | [FT] |
| Post_Injector3- Outport 1 | [FT] |
| Visit_Workshop_Immediately- Outport 1 | [FT] |

Derived Ranges

| Signal | Derived Ranges |
|----------------------------------|----------------|
| Adblue_Injection_Time- Outport 1 | [02458.3] |