

# Simulink Requirements Report

Author(s):shane.farley

Published on:14-Mar-2022

1 The ECU SHALL distribute electrical power to individual component loads.. Change .....	4
2 Electrical components SHALL be properly grounded .....	4
2.1 Electrical components SHALL have a resistance from connector to ground of not less than 5mA .....	5
3 There SHALL be a means of controlling the ECU status .....	5
4 .....	6
5 There shall be a means to monitor the electrical system .....	6
1 .....	9
Artifact List .....	10

## Chapter 1: Requirement Set: Requirement\_Set\_test

### Description

Testing how the requirement functionality works

### Attributes

<b>Filepath</b>	C:\Users\shane.farley\MATLAB\Projects\test\Requirement_Set_test.slreqx
<b>Revision</b>	3
<b>Created by</b>	shane.farley
<b>Created on</b>	14-Mar-2022 17:09:02
<b>Modified by</b>	shane.farley
<b>Modified on</b>	14-Mar-2022 17:56:29

### Custom Attribute Registries

### Implementation Status

Total	Implemented	Justified	None
6	5	0	1

### Verification Status

Total	Passed	Justified	Failed	Unexecuted	None
6	0	0	0	0	6

**Change Information** No change issue detected.

## 1 The ECBU SHALL distribute electrical power to individual component loads.. Change

**Requirement Type** Functional

**ID** XW\_Power\_1

**Description**

**Rationale**

**Keywords**

**Revision Information**

<b>SID</b>	1	<b>Revision</b>	3
<b>Created by</b>	shane.farley	<b>Created on</b>	14-Mar-2022 17:09:28
<b>Modified by</b>	shane.farley	<b>Modified on</b>	14-Mar-2022 17:51:16

**Custom Attributes**

**Change Information** No change issue detected.

**Links**

**Artifact** [Model Evaluation.slx](#)

☐ [generate, store, and distribute electrical power](#) (←Implemented by )

**Implementation Status**

<b>Total</b>	<b>Implemented</b>	<b>Justified</b>	<b>None</b>
1	1	0	0

**Verification Status**

<b>Total</b>	<b>Passed</b>	<b>Justified</b>	<b>Failed</b>	<b>Unexecuted</b>	<b>None</b>
1	0	0	0	0	1

**Comments**

## 2 Electrical components SHALL be properly grounded

**Requirement Type** Functional

**ID** #2

**Description**

**Rationale**

**Keywords**

**Revision Information**

<b>SID</b>	2	<b>Revision</b>	1
<b>Created by</b>	shane.farley	<b>Created on</b>	14-Mar-2022 17:11:24
<b>Modified by</b>	shane.farley	<b>Modified on</b>	14-Mar-2022 17:12:02

**Custom Attributes**

**Change Information** No change issue detected.

**Links**

**Artifact** [Model Evaluation.slx](#)

☐ [Provide grounding](#) (←Implemented by )

**Implementation Status**

Total	Implemented	Justified	None
2	2	0	0

**Verification Status**

Total	Passed	Justified	Failed	Unexecuted	None
2	0	0	0	0	2

**Comments**

## 2.1 Electrical components SHALL have a resistance from connector to ground of not less than 5mA

**Requirement Type** Functional**ID** #4**Description****Rationale****Keywords****Revision Information**

<b>SID</b>	4	<b>Revision</b>	1
<b>Created by</b>	shane.farley	<b>Created on</b>	14-Mar-2022 17:20:43
<b>Modified by</b>	shane.farley	<b>Modified on</b>	14-Mar-2022 17:21:57

**Custom Attributes****Change Information** No change issue detected.**Links****Artifact** [Model Evaluation.slx](#)☐ [Provide grounding](#) (←Implemented by )**Implementation Status**

Total	Implemented	Justified	None
1	1	0	0

**Verification Status**

Total	Passed	Justified	Failed	Unexecuted	None
1	0	0	0	0	1

**Comments**

## 3 There SHALL be a means of controlling the ECU status

**Requirement Type** Functional**ID** #3**Description****Rationale****Keywords****Revision Information**

<b>SID</b>	3	<b>Revision</b>	1
------------	---	-----------------	---

<b>Created by</b>	shane.farley	<b>Created on</b>	14-Mar-2022 17:12:02
<b>Modified by</b>	shane.farley	<b>Modified on</b>	14-Mar-2022 17:12:34

#### Custom Attributes

**Change Information** No change issue detected.

#### Links

**Artifact** [Model\\_Evaluation.slx](#)

☐ [provide automatic control of electrical power to loads](#) (←Implemented

by )

#### Implementation Status

Total	Implemented	Justified	None
1	1	0	0

#### Verification Status

Total	Passed	Justified	Failed	Unexecuted	None
1	0	0	0	0	1

#### Comments

4

**Requirement Type** Functional

**ID** #6

**Description**

Th

**Rationale**

**Keywords**

#### Revision Information

<b>SID</b>	6	<b>Revision</b>	1
<b>Created by</b>	shane.farley	<b>Created on</b>	14-Mar-2022 17:28:03
<b>Modified by</b>	shane.farley	<b>Modified on</b>	14-Mar-2022 17:28:13

#### Custom Attributes

**Change Information** No change issue detected.

#### Links

#### Implementation Status

Total	Implemented	Justified	None
1	0	0	1

#### Verification Status

Total	Passed	Justified	Failed	Unexecuted	None
1	0	0	0	0	1

#### Comments

## 5 Their shall be a means to monitor the electrical system

**Requirement Type** Functional

ID #7

Description

Rationale

Keywords

Revision Information

<b>SID</b>	7	<b>Revision</b>	2
<b>Created by</b>	shane.farley	<b>Created on</b>	14-Mar-2022 17:28:26
<b>Modified by</b>	shane.farley	<b>Modified on</b>	14-Mar-2022 17:30:28

Custom Attributes

Change Information No change issue detected.

Links

Artifact [Model\\_Evaluation.slx](#)

☐ [Monitor electrical system](#) (←Implemented by )

Implementation Status

Total	Implemented	Justified	None
1	1	0	0

Verification Status

Total	Passed	Justified	Failed	Unexecuted	None
1	0	0	0	0	1

Comments

## Chapter 2: Requirement Set: Requirement\_Set2\_Fuel

### Description

#### Attributes

<b>Filepath</b>	C:\Users\shane.farley\MATLAB\Projects\test\Requirement_Set2_Fuel.sreqx
<b>Revision</b>	1
<b>Created by</b>	shane.farley
<b>Created on</b>	14-Mar-2022 17:14:22
<b>Modified by</b>	shane.farley
<b>Modified on</b>	14-Mar-2022 17:30:06

#### Custom Attribute Registries

**Name:** IsComplete  
**Type:** Checkbox  
**Default value:** false  
**Description:**

**Name:** IsValid  
**Type:** Checkbox  
**Default value:** false  
**Description:**

**Name:** VerificationMethod  
**Type:** Checkbox  
**Default value:** false  
**Description:**

#### Implementation Status

Total	Implemented	Justified	None
1	0	0	1

#### Verification Status

Total	Passed	Justified	Failed	Unexecuted	None
1	0	0	0	0	1

**Change Information** No change issue detected.



1

**Requirement Type**      Functional

**ID**      #1

**Description**

**Rationale**

**Keywords**

**Revision Information**

<b>SID</b>	1	<b>Revision</b>	1
<b>Created by</b>	shane.farley	<b>Created on</b>	14-Mar-2022 17:15:02
<b>Modified by</b>	shane.farley	<b>Modified on</b>	14-Mar-2022 17:15:02

**Custom Attributes**

**IsComplete:**      false

**IsValid:**      false

**VerificationMethod:**      false

**Change Information**      No change issue detected.

**Links**

**Implementation Status**

<b>Total</b>	<b>Implemented</b>	<b>Justified</b>	<b>None</b>
1	0	0	1

**Verification Status**

<b>Total</b>	<b>Passed</b>	<b>Justified</b>	<b>Failed</b>	<b>Unexecuted</b>	<b>None</b>
1	0	0	0	0	1

**Comments**

## Appendix

### Artifact List

Simulink models:

#	Name	Folder	Version
1	Model_Evaluation.slx	C:\Users\shane.farley\MATLAB\Projects\test	1.17