|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | |  |
|  |  | | |  |
|  | Function Group Spec  HMI System  <<Logical>> (Allocated) | | |  |
|  |  |
|  |  |
|  |  | | |  |
| Document Type | **Function Specification** | | |  |
| Template Version | **6.0** | | |  |
| SysML Report Template Version | **O Beta (11/6/2019)** | | |  |
| Document ID | **fuctional spec hmi system 03102021.docx** | | |  |
| Document Location |  | | |  |
| Document Owner | **MyName** | | |  |
| Document Revision | **FGS0** | | |  |
| Document Status | **Draft** | | |  |
| Date Issued | **2021-03-10** | | |  |
| Date Revised | **2021-03-10** | | |  |
| Document Classification | GIS1 Item Number: | **27.60/35** | |  |
| GIS2 Classification: | **Confidential** | |
|  | | | | |
|  | | | | |
| Document Approval | | | | |
| Name | Role | | Email Confirmation | Date |
|  |  | |  |  |
|  |  | |  |  |

Auto-Generated by MagicDraw

Printed Copies are Uncontrolled

# Disclaimer

**This document contains Ford Motor Company Confidential information. Disclosure of the information contained in any portion of this document is not permitted without the expressed, written consent of a duly authorized representative of Ford Motor Company, Dearborn, Michigan, U.S.A.**

**Copyright, Ó 2016 Ford Motor Company**

This document contains information developed and accumulated by and for FORD MOTOR COMPANY. As such, it is a proprietary document, which, if disseminated to unauthorized persons, would provide others with restricted information, data, or procedures not otherwise available, exposing the FORD MOTOR COMPANY to potential harm.

Employees and suppliers having custody of this specification or authorized to use it must be cognizant of its proprietary nature and ensure that the information herein is not made available to unauthorized persons.

FORD MOTOR COMPANY reserves the right to protect this work as an unpublished copyrighted work in the event of an inadvertent or deliberate unauthorized publication. FORD MOTOR COMPANY also reserves its rights under copyright laws to protect this work as a published work.

This document or portions thereof shall not be distributed outside FORD MOTOR COMPANY without prior written consent. Refer all questions concerning disclosure to the author(s) or to any duly authorized representative of Ford Motor Company.

# Contents

[Disclaimer 2](#_Toc66359186)

[Contents 3](#_Toc66359187)

[1 Introduction 5](#_Toc66359188)

[1.1 Document Purpose 5](#_Toc66359189)

[1.2 Document Scope 5](#_Toc66359190)

[1.3 Document Audience 5](#_Toc66359191)

[1.3.1 Stakeholder List 5](#_Toc66359192)

[1.4 Document Organization 5](#_Toc66359193)

[1.4.1 Document Context 5](#_Toc66359194)

[1.4.2 Document Structure 5](#_Toc66359195)

[1.5 Document Conventions 6](#_Toc66359196)

[1.5.1 Requirements Templates 6](#_Toc66359197)

[2 Function Group Description 7](#_Toc66359198)

[3 Functional Architecture 8](#_Toc66359199)

[3.1 Description 8](#_Toc66359200)

[3.2 Function List 8](#_Toc66359201)

[3.3 Signal List 8](#_Toc66359202)

[4 Function Specifications 9](#_Toc66359203)

[4.1 -635341276.jpg Detect User Request 9](#_Toc66359204)

[4.1.1 Function Overview 9](#_Toc66359205)

[4.1.2 Function Scope 10](#_Toc66359206)

[4.1.3 Function Interfaces 10](#_Toc66359207)

[4.1.4 Function Modeling 11](#_Toc66359208)

[4.1.5 Function Requirements 12](#_Toc66359209)

[4.2 219788184.jpg Display Shading Status 13](#_Toc66359210)

[4.2.1 Function Overview 13](#_Toc66359211)

[4.2.2 Function Scope 14](#_Toc66359212)

[4.2.3 Function Interfaces 14](#_Toc66359213)

[4.2.4 Function Modeling 15](#_Toc66359214)

[4.2.5 Function Requirements 15](#_Toc66359215)

[4.3 -2116771709.jpg Display Shading Status 16](#_Toc66359216)

[4.3.1 Function Overview 16](#_Toc66359217)

[4.3.2 Function Scope 16](#_Toc66359218)

[4.3.3 Function Interfaces 17](#_Toc66359219)

[4.3.4 Function Modeling 17](#_Toc66359220)

[4.3.5 Function Requirements 18](#_Toc66359221)

[4.4 219788184.jpg Provide PSDS Status 19](#_Toc66359222)

[4.4.1 Function Overview 19](#_Toc66359223)

[4.4.2 Function Scope 20](#_Toc66359224)

[4.4.3 Function Interfaces 20](#_Toc66359225)

[4.4.4 Function Modeling 20](#_Toc66359226)

[4.4.5 Function Requirements 21](#_Toc66359227)

[4.5 219788184.jpg Provide User Input 22](#_Toc66359228)

[4.5.1 Function Overview 22](#_Toc66359229)

[4.5.2 Function Scope 22](#_Toc66359230)

[4.5.3 Function Interfaces 23](#_Toc66359231)

[4.5.4 Function Modeling 23](#_Toc66359232)

[4.5.5 Function Requirements 23](#_Toc66359233)

[4.6 219788184.jpg Sense User Input 24](#_Toc66359234)

[4.6.1 Function Overview 24](#_Toc66359235)

[4.6.2 Function Scope 25](#_Toc66359236)

[4.6.3 Function Interfaces 25](#_Toc66359237)

[4.6.4 Function Modeling 25](#_Toc66359238)

[4.6.5 Function Requirements 26](#_Toc66359239)

[5 Open Concerns 27](#_Toc66359240)

[6 Revision History 28](#_Toc66359241)

[7 Appendix 29](#_Toc66359243)

[7.1 Data Dictionary 29](#_Toc66359244)

[7.1.1 Logical Signals 29](#_Toc66359245)

[7.1.2 Logical Parameters 31](#_Toc66359246)

[7.1.3 Encoding Types 31](#_Toc66359247)

[7.2 Glossary 31](#_Toc66359248)

[7.2.1 Definitions 31](#_Toc66359249)

[7.2.2 Abbreviations 32](#_Toc66359250)

**List of Figures**

[Figure 1: Activity Diagram of -215656350.jpg “Request automatic PSDS actuation” calling -635341276.jpg “Detect User Request” 10](#_Toc66359251)

[Figure 2: Activity Diagram of -215656350.jpg “Request PSDS Manual Actuation” calling -635341276.jpg “Detect User Request” 10](#_Toc66359252)

[Figure 3: Detect User Request 12](#_Toc66359253)

[Figure 4: Activity Diagram of -127615184.jpg “Request automatic PSDS actuation” calling -2116771709.jpg “Display Shading Status” 17](#_Toc66359254)

[Figure 5: Activity Diagram of -127615184.jpg “Request PSDS Manual Actuation” calling -2116771709.jpg “Display Shading Status” 17](#_Toc66359255)

[Figure 6: Display Shading Status 18](#_Toc66359256)

**List of Tables**

[Table 1: Functions described in this specification 5](#_Toc66359257)

[Table 2: List of Logical Functions 8](#_Toc66359258)

[Table 3: Ford internal Documents *(not specified in model)* 10](#_Toc66359259)

[Table 4: External documents and publications *(not specified in model)* 10](#_Toc66359260)

[Table 5: Ford internal Documents *(not specified in model)* 14](#_Toc66359261)

[Table 6: External documents and publications *(not specified in model)* 14](#_Toc66359262)

[Table 7: Ford internal Documents *(not specified in model)* 16](#_Toc66359263)

[Table 8: External documents and publications *(not specified in model)* 16](#_Toc66359264)

[Table 9: Ford internal Documents *(not specified in model)* 20](#_Toc66359265)

[Table 10: External documents and publications *(not specified in model)* 20](#_Toc66359266)

[Table 11: Ford internal Documents *(not specified in model)* 22](#_Toc66359267)

[Table 12: External documents and publications *(not specified in model)* 22](#_Toc66359268)

[Table 13: Ford internal Documents *(not specified in model)* 25](#_Toc66359269)

[Table 14: External documents and publications *(not specified in model)* 25](#_Toc66359270)

[Table 15: Open Concerns *(Not supported by MagicDraw report generation.)* 27](#_Toc66359271)

# Introduction

## Document Purpose

The Function (Group) Specification (FS) specifies an individual function / a group of functions.

To get more information about the concept of feature, function and component level abstraction refer to the [Ford RE Wiki](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Engineering+for+SW+Enabled+Features).

## Document Scope

The following set of functions from the [Global Feature & Function List](https://www.vsemweb.ford.com:443/tc/launchapp?-attach=true&-s=226TCSession&-o=ZmZNi0JHx3NrTDAAAAAAAAAAAAA) is described in this specification.

|  |  |  |  |
| --- | --- | --- | --- |
| **Function ID** | **Function Name** | **Owner** | **Reference** |
|  |  |  |  |

**Table 1: Functions described in this specification**

## Document Audience

The FS is authored by the owners of the individual functions. All Stakeholders, i.e., all people who have a valid interest in the functions and their behavior should read and, if possible, review the FS. It needs to be guaranteed, that all stakeholders have access to the currently valid version of the FS.

**#Hint:** The FS template has the IP Classification “Proprietary” by default. IP Classification “Confidential” might be required in some cases, e.g. by Ford Functional Safety.

### Stakeholder List

For the latest list of the feature stakeholder and their roles & responsibilities refer to <Put VSEM Link here>.

**#Hint:** Refer to [Ford RE Wiki – Stakeholder List](http://wiki.ford.com/display/RequirementsEngineering/Stakeholder+Analysis) on how to create a stakeholder list. The stakeholder list should be stored in VSEM in the pseudo folder “General Data Artifacts” of the corresponding function.

## Document Organization

### Document Context

Refer to the [Specification Structure page](http://wiki.ford.com/display/RequirementsEngineering/Specification+templates) in the [Ford RE Wiki](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Engineering+for+SW+Enabled+Features) to understand how the FS relates to other Ford Requirements Documents and Specifications.

### Document Structure

The structure of this document is explained below:

**Section 1** – Introduction how to use this document including responsibilities and requisite documents. Explains the terminology. Gives a clarification of the definitions, concepts and abbreviations used in the document.

**Section 2** – Function Group Description. Gives an overview and the purpose of the function group.

**Section 3** – Functional Architecture: Specifies the overall functional architecture of the function group

**Section 4** – Function Specifications: Specifies the logical functions of the function group in detail

**Section 5** – List of Open Concerns

**Section 6** Revision history including a list of new or modified requirements. The requirements in this document are tagged, and this section contains different types of tables listing all, new, or changed requirements by their title and page no.

**Section 7** – Appendix: Presenting additional data mainly in a tabular form, e.g., a data dictionary

**#Hint:** All sections are mandatory, unless explicitly marked by the tag “#Classification” as “optional” or as applicable e.g. to certain domains like “Functional Safety”.

## Document Conventions

### Requirements Templates

Each requirement, use case or scenario in this specification shall follow the corresponding template given in the document template *Specification\_Macros.dotm* at [RE Wiki - Specification Templates](http://wiki.ford.com/display/RequirementsEngineering/Specification+templates?src=contextnavpagetreemode).

#### Identification of Requirements

#### Requirements Attributes

The templates provided by *Specification\_Macros.dotm* define a list of attributes for each requirement. This helps to classify the requirement. The attributes are explained at [RE Wiki - Requirements Attributes](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes?src=contextnavpagetreemode).

# Function Group Description

**#Classification:** Function Group only (remove section, if only a single Function is specified in this document)

**#Hint**: Provide an overview / a description of the Function Group

This Function Group consists of all functions allocated to 1240332282.jpg **HMI System** <<Logical>> including all functions in their corresponding call trees.

Description of HMI System:

# Functional Architecture

**#Classification:** Function Group only (remove section, if only a single Function is specified in this document)

**#Hint:** The Functional Architecture shall reflect the result of the functional decomposition for a given feature or parts of it.

Refer to the [*RE Wiki – Functional Decomposition*](http://wiki.ford.com/display/RequirementsEngineering/Functional+Analysis+and+Architecture) for some guidance on how to decompose a feature into functions, i.e., how to find the right functional partitioning for the function level. The functions shown here are those, which are specified in section 4 “Function Specifications”.

## Description

**#Hint:** Provide some informal description of the characteristics of the chosen architecture. Also give some graphical representation of the Functional Architecture. Either SysML Internal Block diagrams or [Data Flow Diagrams](http://wiki.ford.com/display/RequirementsEngineering/Data+Flow+Diagram?src=contextnavpagetreemode) could be used to depict such a Functional Architecture.

**#Link:** [*SysML – Internal Block Diagrams*](https://pd3.spt.ford.com/sites/SystemsEngineering/SEC/sysml-teamsite/SysML%20Wiki/Internal%20Block%20Diagram%20Basics.aspx) or [*RE Wiki - Data Flow Diagrams*](http://wiki.ford.com/display/RequirementsEngineering/Data+Flow+Diagram?src=contextnavpagetreemodehttp://wiki.ford.com/display/RequirementsEngineering/Data+Flow+Diagram?src=contextnavpagetreemode)

## Function List

|  |  |  |  |
| --- | --- | --- | --- |
| **Function ID** | **Function Name** | **Function Description** | **ASIL** |
|  | 2018512189.jpg [Provide User Input](#_8e14ab13867573fbf3a646627687ef46) <<Subsystem Function>> |  |  |
|  | 2018512189.jpg [Display Shading Status](#_cd20984fca934bfe61e3e256378b9286) <<Subsystem Function>> |  |  |
|  | 2018512189.jpg [Sense User Input](#_2a0f7ec285003e3296fd8f45980b964c) <<Subsystem Function>> |  |  |
|  | -635341276.jpg [Detect User Request](#_ae293615782ca3e5af79f46735e79a4a) <<System Function>> |  |  |
|  | -635341276.jpg [Display Shading Status](#_30106be9f4b3f520f9f578f7723c754f) <<System Function>> |  |  |
|  | 2018512189.jpg [Provide PSDS Status](#_07a569b44de364cbb6f680707d6053bc) <<Subsystem Function>> |  |  |

Table 2: List of Logical Functions

## Signal List

Refer to the [Data Dictionary](#_Data_Dictionary) - [Logical Signals](#_Logical_Signals).

# Function Specifications

## -635341276.jpg Detect User Request

### Function Overview

#### Description

**#Hint:** Some descriptive text to explain the purpose and functionality of the function.

Function is allocated to:

* 1240332282.jpg HMI System <<Logical>>

No description provided for this function.

#### Variants

**#Classification**: Mandatory (State “Not applicable”, if not used)

**#Hint:** If different variants of the same function are specified in this section, list those variants in the table below.

Variants on Function level could be driven technology or feature content. Example: There could be a “Low Content” and a “High Content” variant of some exterior lighting function. The Low Content variant applies for Conventional Headlight technology, the High Content variant applies for LED and Xenon technology. In this case we call the different technologies the Variant Options (for the time being you could think of them as Logical Parameters) which the Variant depends on. The optional column “Variant condition” allows to express the dependency of a Variant based on Variant Options/Logical Parameters.

If requirements/signals are not applicable for all variants/variant options, those requirements should state explicitly, which function variant/variant option they apply to.

**#Link:** [RE Wiki – Variant Management](http://wiki.ford.com/display/RequirementsEngineering/Variant+Management).

*Not supported by MagicDraw report generation.*

#### Input Requirements

**#Classification**: Mandatory (State “Not applicable”, if not used)

**#Hint:** List any input requirements here (legal, Trustmark), which need to be taken into account, beyond what is specified in the corresponding Feature Documents.

*Not supported by MagicDraw report generation.*

#### Assumptions

**#Classification**: Mandatory (State “Not applicable”, if not used)

**#Hint:** A list of known assumptions concerning the effects of the function’s behavior on other functions or elements (i.e., dependencies) as well as assumptions on the behavior expected by the function (e.g. known limitations). During the course of the development most of those assumptions are typically either converted into actual requirements or discarded at some point – such that this chapter remains mostly empty.

No assumptions specified for this function.

#### References

##### Ford Documents

List here all Ford internal documents, which are directly related to the feature.

| **Reference** | **Title** | **Doc. ID** | **Revision** |
| --- | --- | --- | --- |
|  |  |  |  |

Table 3: Ford internal Documents *(not specified in model)*

##### External Documents and Publications

The list of external documents could include books, reports and online sources.

**#Hint:** You may refer to [IEEE Citation Reference](http://www.ieee.org/documents/ieeecitationref.pdf) on how to format a reference.

| **Reference** | **Document / Publication** |
| --- | --- |
|  |  |

Table 4: External documents and publications *(not specified in model)*

#### Glossary

See Appendix for Definitions and Abbreviations.

### Function Scope

The -635341276.jpg **– “Detect User Request”** function is called by the following functions:

* -215656350.jpg – “[Request automatic PSDS actuation](#_d106f106340837f1d94f1636fae5ca90)”
* -215656350.jpg – “[Request PSDS Manual Actuation](#_80d4219162c8bf81e978a4f7ad8ff346)”

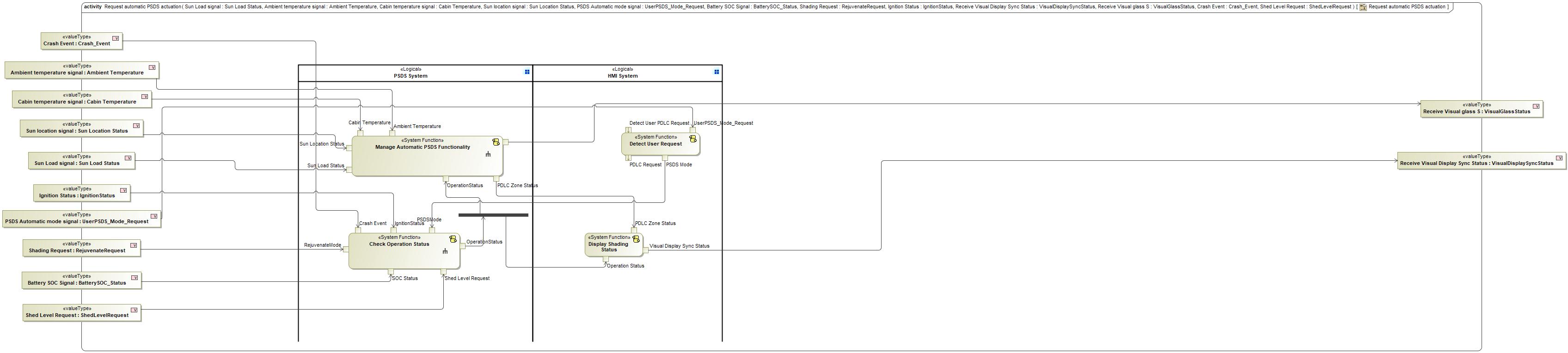


Figure 1: Activity Diagram of -215656350.jpg “Request automatic PSDS actuation” calling -635341276.jpg “Detect User Request”

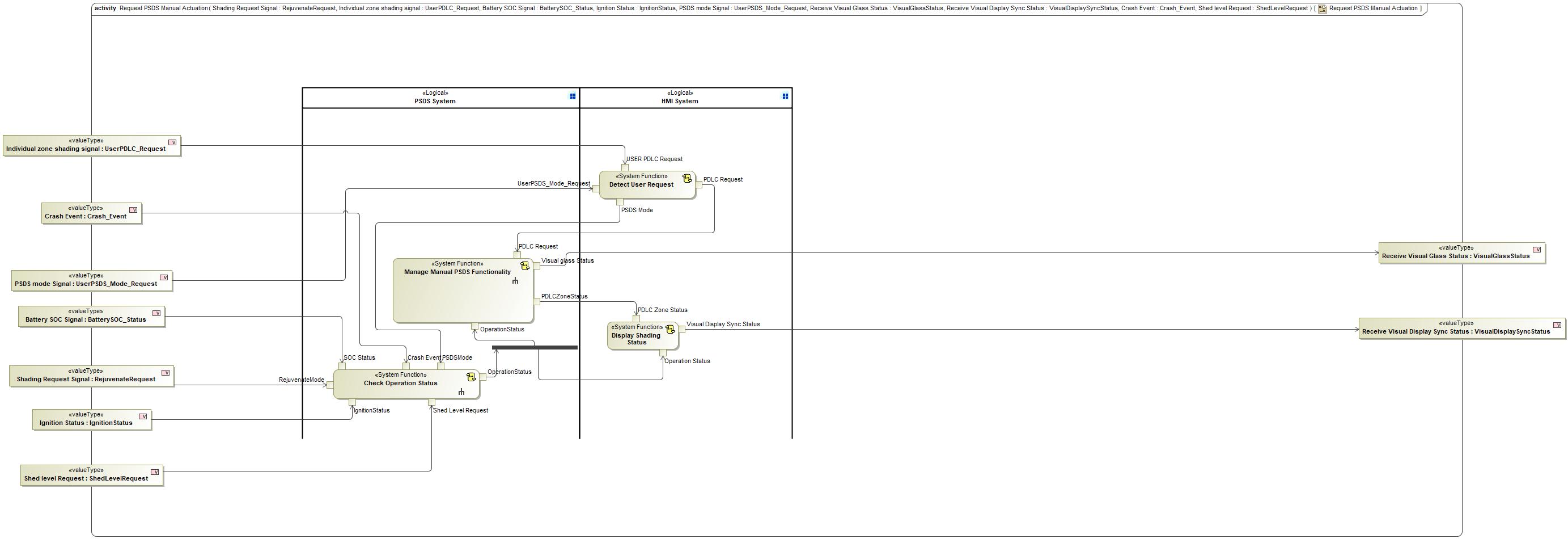


Figure 2: Activity Diagram of -215656350.jpg “Request PSDS Manual Actuation” calling -635341276.jpg “Detect User Request”

### Function Interfaces

**#Link:** [RE Wiki – Adding a Logical Signal or Parameter](http://wiki.ford.com/display/RequirementsEngineering/Adding+a+Logical+Signal+or+Parameter)

#### Logical Inputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| Detect User PDLC Request  Type:  733033252.jpg [UserPDLC\_Request](#_d05f0733d8f8a9033b0271095bb92ee6) | Received from:   * 198874124.jpg Activity Parameter Node: Individual zone shading signal |
| UserPSDS\_Mode\_Request  Type:  733033252.jpg [UserPSDS\_Mode\_Request](#_5c61d621ba28663d60211d361ef25059) | Received from:   * 198874124.jpg Activity Parameter Node: PSDS Manual mode Signal * 198874124.jpg Activity Parameter Node: PSDS Automatic mode signal |

#### Logical Outputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| PDLC Request  Type:  733033252.jpg [PDLC Request](#_a8b88079f2045de463c4af8dbc29afc0) | Sent to:   * 1864100599.jpg [Manage Manual PSDS Functionality](#_5dd0caf2c53404027658cadf9f6549ac) |
| PSDS Mode  Type:  733033252.jpg [PSDSMode](#_9923d4f2496cdd0f0bf90fe9536b6afc) | Sent to:   * -2116771709.jpg [Check Operation Status](#_f5dc29255307897c45bdebcb8fd33800) |

#### Logical Parameters

**#Hint**: Put requirements for parameters here, which are implemented as configuration parameters using Method 2 or 3 or as parameters for calibration.

*Not supported by MagicDraw report generation.*

### Function Modeling

**#Classification:** Mandatory

**#Hint:** Typical modeling artifacts in this section are State Machines, Activity Diagrams / Flow Charts, Decision Tables, and possibly Sequence Diagrams, which can all be used as techniques to analyze the function requirements.

**#Links:** Analyze / Model Requirements: [RE Wiki – Analyze / Model Requirements](http://wiki.ford.com/pages/viewpage.action?pageId=110594919&src=contextnavpagetreemode)

#### Use Cases

**#Classification:** Infotainment Only (remove section, if not used)

**#Hint:** Some Domains (e.g. Infotainment) use not only Customer Use Cases (in the Feature Doc), but refine Use Case descriptions down to function level. In general, the RE approach encourages the use of Use Cases on Feature Level but not on Function Level. Activity Diagrams are a more suitable way to express the same on Function Level.

**#Links:** Infotainment – “Harmony Systems Engineering” Approach

*Not supported by MagicDraw report generation.*

#### State Charts / Activity Diagrams / Sequence Diagrams / Decision Tables

**#Classification:** Mandatory

**#Hint:** It is highly recommended to use at least one of the following modeling techniques for modeling and analyzing the Function behavior and derived requirements (refer to sample diagrams below):

State Machines, Activity Diagrams / Flow Charts, or Decision Tables

Optionally, Sequence Diagrams might help to analyze the interaction between Functions.

**#Links:** Analyze / Model Requirements: [RE Wiki – Analyze / Model Requirements](http://wiki.ford.com/pages/viewpage.action?pageId=110594919&src=contextnavpagetreemode)

State Charts [RE Wiki – State Charts](http://wiki.ford.com/display/RequirementsEngineering/State+Charts?src=contextnavpagetreemode)

Activity Diagrams: [RE Wiki – Activity Diagram](http://wiki.ford.com/display/RequirementsEngineering/Activity+Diagram?src=contextnavpagetreemode), [SysML User Group – Activity Diagram Basics](https://pd3.spt.ford.com/sites/SystemsEngineering/SEC/sysml-teamsite/SysML%20Wiki/Activity%20Diagram%20Basics.aspx)

Sequence Diagrams: [RE Wiki – Sequence Chart](http://wiki.ford.com/display/RequirementsEngineering/Sequence+Chart?src=contextnavpagetreemode), [SysML User Group – Sequence Diagram Basics](https://pd3.spt.ford.com/sites/SystemsEngineering/SEC/sysml-teamsite/SysML%20Wiki/Sequence%20Diagram%20Basics.aspx)

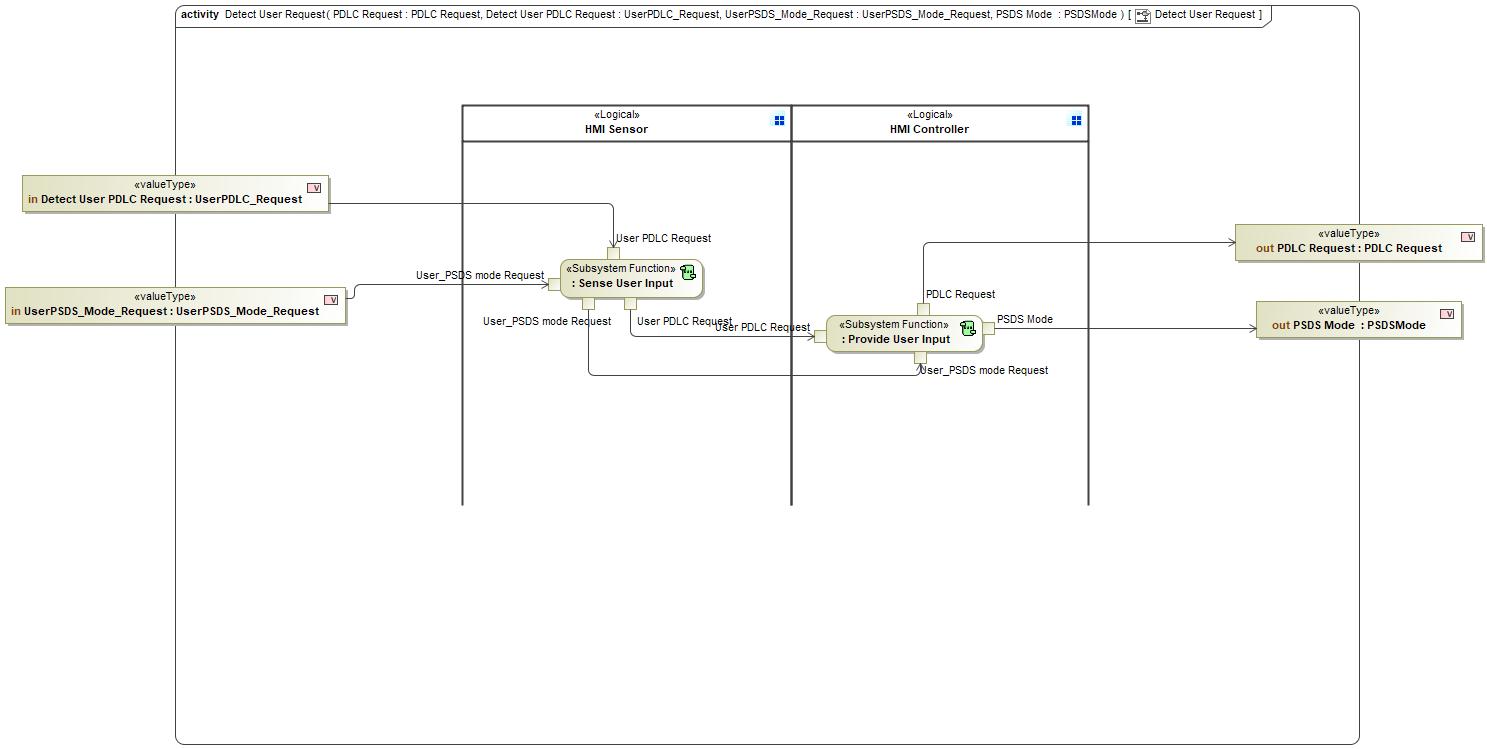


Figure 3: Detect User Request

### Function Requirements

#Link: [*RE Wiki – How to write good requirements*](http://wiki.ford.com/display/RequirementsEngineering/How+to+write+better+requirements?src=contextnavpagetreemode)

#### Functional Requirements

***#Hint:*** *Please also consider specific situations like Initialization (Startup) and Deinitialization (Shutdown) apart from Normal Operation and Error Handling. E.g. a* state chart or activity diagram might help for better understanding.

##### Normal Operation

No Normal Operation Requirements specified.

##### Error Handling

***#Hint:*** *FMEA counter measures could be considered as requirements in this chapter*

No Error Handling Requirements specified.

#### Non-Functional Requirements

***#Hint:*** *Non-functional requirements specify some performance criteria in addition to the functional behavior given defined by the functional requirements. Timing (if not already included in the functional requirements), security details (e.g. how secure does an algorithm have to be) or reliability (e.g. mean time between failure) could be specified in this section.*

No Non-Functional Requirements specified.

#### Functional Safety Requirements

**#Classification**: Functional Safety only – If not used, remove content and state “Not Applicable”

***#Hint:*** *Add Functional Safety Requirements (FSRs) derived for this function.*

**#Link:** [Functional Safety Sharepoint](https://pd3.spt.ford.com/sites/GlobalFunctionalSafety/Pages/default.aspx) – Functional Safety Concept

[RE Wiki - Requirements Attributes](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes)

No Functional Safety Requirements specified.

##### ASIL Decomposition of Functional Safety Requirements

**#Classification**: Functional Safety only – If not used, remove content and state “Not Applicable”

***#Hint:*** *Sometimes an ASIL decomposition of Functional Safety Requirements is required. The decomposed FSRs should be listed beneath each ASIL Decomposition table below and referenced inside the table by ID and Title*

**#Link:** [Functional Safety Sharepoint](https://pd3.spt.ford.com/sites/GlobalFunctionalSafety/Pages/default.aspx) – Functional Safety Concept

No Functional Safety Requirements with ASIL Decompositions specified.

#### Other Requirements

##### Design Requirements

***#Hint:*** *Requirements of a Logical Function should be typically agnostic of their SW/HW implementation*. If for specific reasons the function owner needs to define explicitly design constraints, it can be done in this chapter.

No Design Requirements specified.

#### Uncategorized Requirements

***#Hint:*** *Requirements* that are allocated to this function but do not fit in any of the previous categories are populated below.

Detect User Input

When "Detect User Request" receive "UserPDLC\_Request" "UserPSDS\_Mode\_Request" it shall output "PDLC Request" "PSDSMode"

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** | * 1577559128.jpg PSDS user input via SYNC * 1577559128.jpg PSDS user settings * 1577559128.jpg PSDS user input via Voice Recognition | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** |  | **Status** |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

## 219788184.jpg Display Shading Status

### Function Overview

#### Description

Function is allocated to:

* 467987672.jpg Display PSDS Functionality <<Logical>>
* -443062898.jpg HMI Actuator <<Logical>>
* 467987672.jpg Manage CAN communication <<Logical>>

No description provided for this function.

#### Variants

*Not supported by MagicDraw report generation.*

#### Input Requirements

*Not supported by MagicDraw report generation.*

#### Assumptions

No assumptions specified for this function.

#### References

##### Ford Documents

List here all Ford internal documents, which are directly related to the feature.

| **Reference** | **Title** | **Doc. ID** | **Revision** |
| --- | --- | --- | --- |
|  |  |  |  |

Table 5: Ford internal Documents *(not specified in model)*

##### External Documents and Publications

The list of external documents could include books, reports and online sources.

| **Reference** | **Document / Publication** |
| --- | --- |
|  |  |

Table 6: External documents and publications *(not specified in model)*

#### Glossary

See Appendix for Definitions and Abbreviations.

### Function Scope

The 219788184.jpg **– “Display Shading Status”** function is called by the following functions:

* -2116771709.jpg – “[Display Shading Status](#_30106be9f4b3f520f9f578f7723c754f)”

### Function Interfaces

#### Logical Inputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| PSDS Status  Type:  733033252.jpg [PSDS Status](#_97dadff2334456c6a63313ef8d79d846) | Received from:   * 219788184.jpg [Provide PSDS Status](#_07a569b44de364cbb6f680707d6053bc) |

#### Logical Outputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| Visual Display Sync Status  Type:  733033252.jpg [VisualDisplaySyncStatus](#_ddc79ae283d9e6d67b0661dfa6ffacf5) | Sent to:   * 198874124.jpg Activity Parameter Node: Visual Display Sync Status |

#### Logical Parameters

*Not supported by MagicDraw report generation.*

### Function Modeling

#### Use Cases

*Not supported by MagicDraw report generation.*

#### State Charts / Activity Diagrams / Sequence Diagrams / Decision Tables

No diagrams internal to function specified.

### Function Requirements

#### Functional Requirements

##### Normal Operation

No Normal Operation Requirements specified.

##### Error Handling

No Error Handling Requirements specified.

#### Non-Functional Requirements

No Non-Functional Requirements specified.

#### Functional Safety Requirements

No Functional Safety Requirements specified.

##### ASIL Decomposition of Functional Safety Requirements

No Functional Safety Requirements with ASIL Decompositions specified.

#### Other Requirements

##### Design Requirements

No Design Requirements specified.

#### Uncategorized Requirements

Actuate Shading Status

When "Display Shading Status" receives the "PSDS Status" it shall output "VisualDisplaySyncStatus"

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** |  | **Status** |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

## -2116771709.jpg Display Shading Status

### Function Overview

#### Description

Function is allocated to:

* -443062898.jpg HMI System <<Logical>>

No description provided for this function.

#### Variants

*Not supported by MagicDraw report generation.*

#### Input Requirements

*Not supported by MagicDraw report generation.*

#### Assumptions

No assumptions specified for this function.

#### References

##### Ford Documents

List here all Ford internal documents, which are directly related to the feature.

| **Reference** | **Title** | **Doc. ID** | **Revision** |
| --- | --- | --- | --- |
|  |  |  |  |

Table 7: Ford internal Documents *(not specified in model)*

##### External Documents and Publications

The list of external documents could include books, reports and online sources.

| **Reference** | **Document / Publication** |
| --- | --- |
|  |  |

Table 8: External documents and publications *(not specified in model)*

#### Glossary

See Appendix for Definitions and Abbreviations.

### Function Scope

The -2116771709.jpg **– “Display Shading Status”** function is called by the following functions:

* -127615184.jpg – “[Request automatic PSDS actuation](#_d106f106340837f1d94f1636fae5ca90)”
* -127615184.jpg – “[Request PSDS Manual Actuation](#_80d4219162c8bf81e978a4f7ad8ff346)”

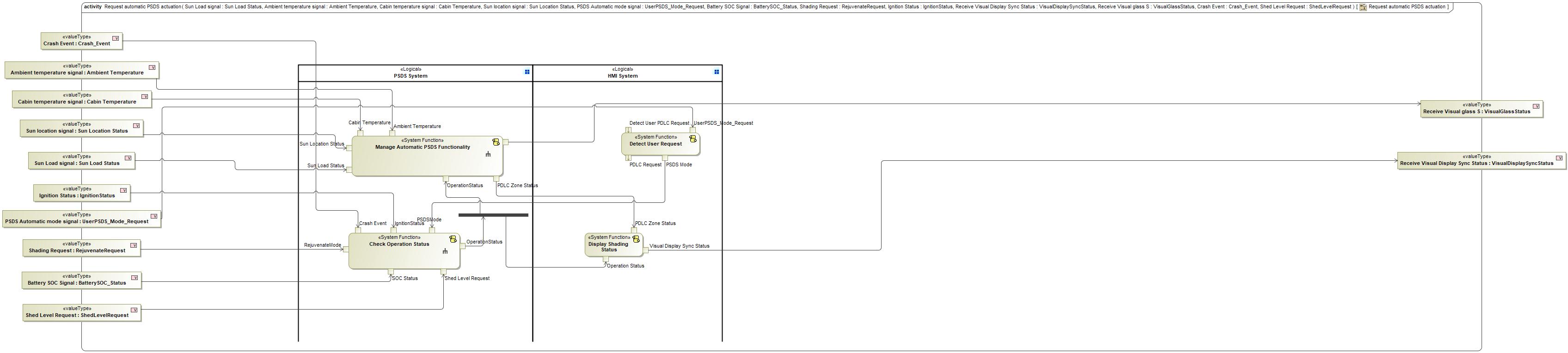


Figure 4: Activity Diagram of -127615184.jpg “Request automatic PSDS actuation” calling -2116771709.jpg “Display Shading Status”

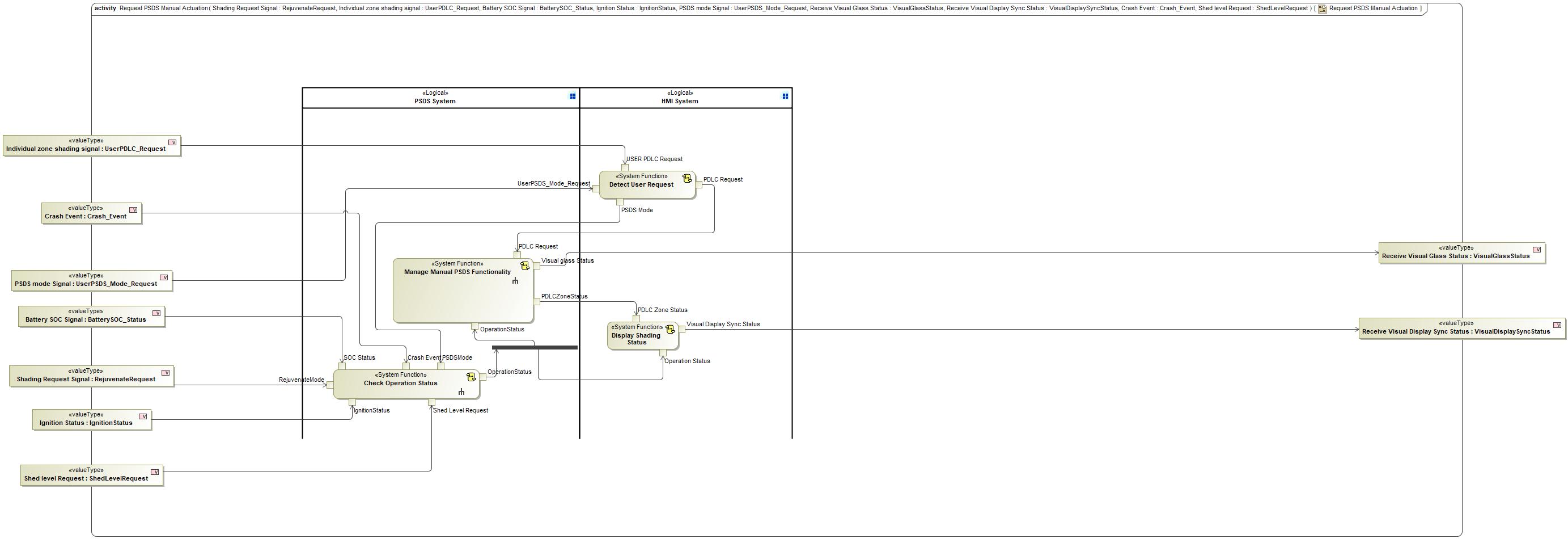


Figure 5: Activity Diagram of -127615184.jpg “Request PSDS Manual Actuation” calling -2116771709.jpg “Display Shading Status”

### Function Interfaces

#### Logical Inputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| Operation Status  Type:  733033252.jpg [OperationStatus](#_feaa84aa935d102228d934f23d12d610) | Received from:   * -2116771709.jpg [Check Operation Status](#_f5dc29255307897c45bdebcb8fd33800) |
| PDLC Zone Status  Type:  733033252.jpg [PDLC Zone Status](#_d6b86d36b3e0b5ab7a590a02f0231532) | Received from:   * -2116771709.jpg [Manage Automatic PSDS Functionality](#_52f88807bf41687de58769c9badc65aa) * -2116771709.jpg [Manage Manual PSDS Functionality](#_5dd0caf2c53404027658cadf9f6549ac) |

#### Logical Outputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| Visual Display Sync Status  Type:  733033252.jpg [VisualDisplaySyncStatus](#_ddc79ae283d9e6d67b0661dfa6ffacf5) | Sent to:   * 198874124.jpg Activity Parameter Node: Receive Visual Display Sync Status * 198874124.jpg Activity Parameter Node: Receive Visual Display Sync Status |

#### Logical Parameters

*Not supported by MagicDraw report generation.*

### Function Modeling

#### Use Cases

*Not supported by MagicDraw report generation.*

#### State Charts / Activity Diagrams / Sequence Diagrams / Decision Tables

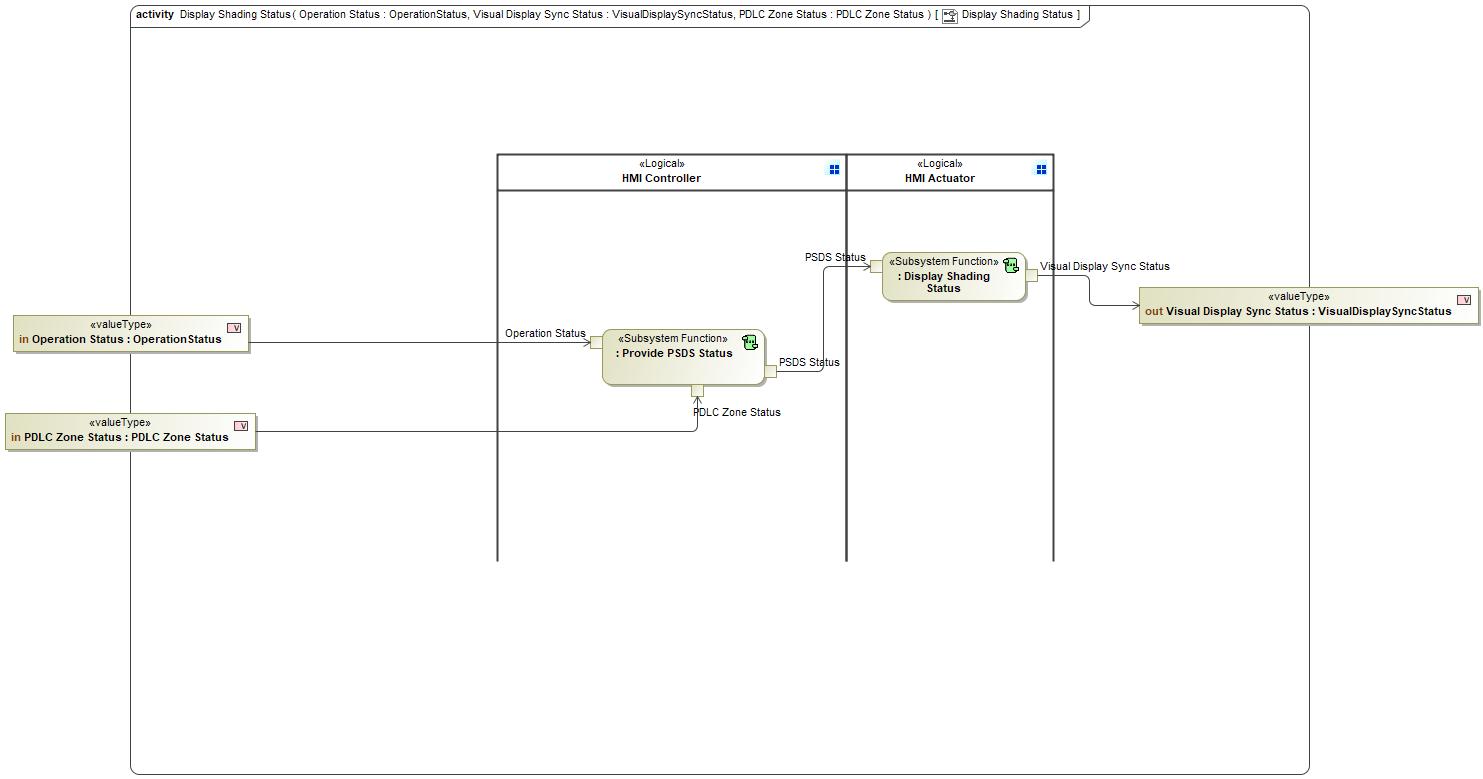


Figure 6: Display Shading Status

### Function Requirements

#### Functional Requirements

##### Normal Operation

No Normal Operation Requirements specified.

##### Error Handling

No Error Handling Requirements specified.

#### Non-Functional Requirements

No Non-Functional Requirements specified.

#### Functional Safety Requirements

No Functional Safety Requirements specified.

##### ASIL Decomposition of Functional Safety Requirements

No Functional Safety Requirements with ASIL Decompositions specified.

#### Other Requirements

##### Design Requirements

No Design Requirements specified.

#### Uncategorized Requirements

Display Shading

When "Display Shading Status" receive "PDLC Zone Status" "OperationStatus" it shall output "VisualDisplaySyncStatus"

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** | * 1577559128.jpg PSDS user feedback | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** |  | **Status** |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

## 219788184.jpg Provide PSDS Status

### Function Overview

#### Description

Function is allocated to:

* 467987672.jpg Display PSDS Functionality <<Logical>>
* -443062898.jpg HMI Controller <<Logical>>
* 467987672.jpg Manage CAN communication <<Logical>>

No description provided for this function.

#### Variants

*Not supported by MagicDraw report generation.*

#### Input Requirements

*Not supported by MagicDraw report generation.*

#### Assumptions

No assumptions specified for this function.

#### References

##### Ford Documents

List here all Ford internal documents, which are directly related to the feature.

| **Reference** | **Title** | **Doc. ID** | **Revision** |
| --- | --- | --- | --- |
|  |  |  |  |

Table 9: Ford internal Documents *(not specified in model)*

##### External Documents and Publications

The list of external documents could include books, reports and online sources.

| **Reference** | **Document / Publication** |
| --- | --- |
|  |  |

Table 10: External documents and publications *(not specified in model)*

#### Glossary

See Appendix for Definitions and Abbreviations.

### Function Scope

The 219788184.jpg **– “Provide PSDS Status”** function is called by the following functions:

* -2116771709.jpg – “[Display Shading Status](#_30106be9f4b3f520f9f578f7723c754f)”

### Function Interfaces

#### Logical Inputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| Operation Status  Type:  733033252.jpg [OperationStatus](#_feaa84aa935d102228d934f23d12d610) | Received from:   * 198874124.jpg Activity Parameter Node: Operation Status |
| PDLC Zone Status  Type:  733033252.jpg [PDLC Zone Status](#_d6b86d36b3e0b5ab7a590a02f0231532) | Received from:   * 198874124.jpg Activity Parameter Node: PDLC Zone Status |

#### Logical Outputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| PSDS Status  Type:  733033252.jpg [PSDS Status](#_97dadff2334456c6a63313ef8d79d846) | Sent to:   * 219788184.jpg [Display Shading Status](#_cd20984fca934bfe61e3e256378b9286) |

#### Logical Parameters

*Not supported by MagicDraw report generation.*

### Function Modeling

#### Use Cases

*Not supported by MagicDraw report generation.*

#### State Charts / Activity Diagrams / Sequence Diagrams / Decision Tables

No diagrams internal to function specified.

### Function Requirements

#### Functional Requirements

##### Normal Operation

No Normal Operation Requirements specified.

##### Error Handling

No Error Handling Requirements specified.

#### Non-Functional Requirements

No Non-Functional Requirements specified.

#### Functional Safety Requirements

No Functional Safety Requirements specified.

##### ASIL Decomposition of Functional Safety Requirements

No Functional Safety Requirements with ASIL Decompositions specified.

#### Other Requirements

##### Design Requirements

No Design Requirements specified.

#### Uncategorized Requirements

Control PSDS Status

When "Provide PSDS Status" receives the "OperationStatus" "PDLC Zone Status" it shall out put "PSDS Status"

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** |  | **Status** |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

## 219788184.jpg Provide User Input

### Function Overview

#### Description

Function is allocated to:

* 467987672.jpg Display PSDS Functionality <<Logical>>
* -443062898.jpg HMI Controller <<Logical>>
* 467987672.jpg Manage CAN communication <<Logical>>

No description provided for this function.

#### Variants

*Not supported by MagicDraw report generation.*

#### Input Requirements

*Not supported by MagicDraw report generation.*

#### Assumptions

No assumptions specified for this function.

#### References

##### Ford Documents

List here all Ford internal documents, which are directly related to the feature.

| **Reference** | **Title** | **Doc. ID** | **Revision** |
| --- | --- | --- | --- |
|  |  |  |  |

Table 11: Ford internal Documents *(not specified in model)*

##### External Documents and Publications

The list of external documents could include books, reports and online sources.

| **Reference** | **Document / Publication** |
| --- | --- |
|  |  |

Table 12: External documents and publications *(not specified in model)*

#### Glossary

See Appendix for Definitions and Abbreviations.

### Function Scope

The 219788184.jpg **– “Provide User Input”** function is called by the following functions:

* -2116771709.jpg – “[Detect User Request](#_ae293615782ca3e5af79f46735e79a4a)”

### Function Interfaces

#### Logical Inputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| User\_PSDS mode Request  Type:  733033252.jpg [UserPSDS\_Mode\_Request](#_5c61d621ba28663d60211d361ef25059) | Received from:   * 219788184.jpg [Sense User Input](#_2a0f7ec285003e3296fd8f45980b964c) |
| PDLC Request  Type:  733033252.jpg [UserPDLC\_Request](#_d05f0733d8f8a9033b0271095bb92ee6) | Received from:   * 219788184.jpg [Sense User Input](#_2a0f7ec285003e3296fd8f45980b964c) |

#### Logical Outputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| PDLC Request  Type:  733033252.jpg [PDLC Request](#_a8b88079f2045de463c4af8dbc29afc0) | Sent to:   * 198874124.jpg Activity Parameter Node: PDLC REquest |
| PSDS Mode  Type:  733033252.jpg [PSDSMode](#_9923d4f2496cdd0f0bf90fe9536b6afc) | Sent to:   * 198874124.jpg Activity Parameter Node: PSDS Mode |

#### Logical Parameters

*Not supported by MagicDraw report generation.*

### Function Modeling

#### Use Cases

*Not supported by MagicDraw report generation.*

#### State Charts / Activity Diagrams / Sequence Diagrams / Decision Tables

No diagrams internal to function specified.

### Function Requirements

#### Functional Requirements

##### Normal Operation

No Normal Operation Requirements specified.

##### Error Handling

No Error Handling Requirements specified.

#### Non-Functional Requirements

No Non-Functional Requirements specified.

#### Functional Safety Requirements

No Functional Safety Requirements specified.

##### ASIL Decomposition of Functional Safety Requirements

No Functional Safety Requirements with ASIL Decompositions specified.

#### Other Requirements

##### Design Requirements

No Design Requirements specified.

#### Uncategorized Requirements

Control User Input

When "Provide User Input" receives the "UserPDLC\_Request" "UserPSDS\_Mode\_Request" it shall output "PDLC Request" "PSDSMode"

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** |  | **Status** |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

## 219788184.jpg Sense User Input

### Function Overview

#### Description

Function is allocated to:

* -443062898.jpg HMI Sensor <<Logical>>
* 467987672.jpg Select the PSDS Functionality <<Logical>>

No description provided for this function.

#### Variants

*Not supported by MagicDraw report generation.*

#### Input Requirements

*Not supported by MagicDraw report generation.*

#### Assumptions

No assumptions specified for this function.

#### References

##### Ford Documents

List here all Ford internal documents, which are directly related to the feature.

| **Reference** | **Title** | **Doc. ID** | **Revision** |
| --- | --- | --- | --- |
|  |  |  |  |

Table 13: Ford internal Documents *(not specified in model)*

##### External Documents and Publications

The list of external documents could include books, reports and online sources.

| **Reference** | **Document / Publication** |
| --- | --- |
|  |  |

Table 14: External documents and publications *(not specified in model)*

#### Glossary

See Appendix for Definitions and Abbreviations.

### Function Scope

The 219788184.jpg **– “Sense User Input”** function is called by the following functions:

* -2116771709.jpg – “[Detect User Request](#_ae293615782ca3e5af79f46735e79a4a)”

### Function Interfaces

#### Logical Inputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| PDLC Request  Type:  733033252.jpg [UserPDLC\_Request](#_d05f0733d8f8a9033b0271095bb92ee6) | Received from:   * 198874124.jpg Activity Parameter Node: Detect User PDLC Request |
| User\_PSDS mode Request  Type:  733033252.jpg [UserPSDS\_Mode\_Request](#_5c61d621ba28663d60211d361ef25059) | Received from:   * 198874124.jpg Activity Parameter Node: UserPSDS\_Mode\_Request |

#### Logical Outputs

|  |  |
| --- | --- |
| **Signal Name** | **Description** |
| PDLC Request  Type:  733033252.jpg [UserPDLC\_Request](#_d05f0733d8f8a9033b0271095bb92ee6) | Sent to:   * 219788184.jpg [Provide User Input](#_8e14ab13867573fbf3a646627687ef46) |
| User\_PSDS mode Request  Type:  733033252.jpg [UserPSDS\_Mode\_Request](#_5c61d621ba28663d60211d361ef25059) | Sent to:   * 219788184.jpg [Provide User Input](#_8e14ab13867573fbf3a646627687ef46) |

#### Logical Parameters

*Not supported by MagicDraw report generation.*

### Function Modeling

#### Use Cases

*Not supported by MagicDraw report generation.*

#### State Charts / Activity Diagrams / Sequence Diagrams / Decision Tables

No diagrams internal to function specified.

### Function Requirements

#### Functional Requirements

##### Normal Operation

No Normal Operation Requirements specified.

##### Error Handling

No Error Handling Requirements specified.

#### Non-Functional Requirements

No Non-Functional Requirements specified.

#### Functional Safety Requirements

No Functional Safety Requirements specified.

##### ASIL Decomposition of Functional Safety Requirements

No Functional Safety Requirements with ASIL Decompositions specified.

#### Other Requirements

##### Design Requirements

No Design Requirements specified.

#### Uncategorized Requirements

User Requested Input

When "Sense User Input" receives "UserPDLC\_Request" "UserPSDS\_Mode\_Request" it shall output "UserPSDS\_Mode\_Request" "UserPDLC\_Request"

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Requirement ID: | | | | | | | |
| **Rationale** |  | | | | | | |
| **Acceptance Criteria** |  | | | | | | |
| **Notes** |  | | | | | | |
| **Source** |  | | | | | **Owner** |  |
| **Source Req.** |  | | | | | **V&V Method** |  |
| **Type** |  | | | **Priority** |  | **Status** |  |
| [Req. Template](http://wiki.ford.com/display/RequirementsEngineering/Requirements+Attributes) Version | | 6.0 | End of Requirement | | | | |

# Open Concerns

**#Hint:** The following list presents open concerns, which have to be discussed or clarified over the course of the on-going requirements engineering.

| ID | Concern Description | e-Tracker / Reference | Responsible | Status | Solution |
| --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |

Table 15: Open Concerns *(Not supported by MagicDraw report generation.)*

# Revision History

**#Hint:** A new version number is assigned to a document with a given revision each time it is checked in to Team Center (TCSE). After release of a revision, the document cannot be edited and no new versions can be created on that revision. When updating the document after that, a new revision has to be created and new versions on that revision will be created upon checking in.

No Revision History found.

## Template Revisions

*#Important: Do not change this section*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Rev. | Date | Description | Responsible |
| *1* | *0* | *2016-02-26* | *Initial version, derived from FDS* | *Jbaden1* |
| *1* | *1* | *2016-02-26* | *Word properties corrected* | *Jbaden1* |
| *1* | *2* | *2016-03-10* | *Clean up of document meta data (Word properties)* | *Jbaden1* |
| *1* | *3* | *2016-03-22* | * *Footer formatting corrected (Issue 19)* * *“Constraints” chapter renamed to “Input Requirements” (Issue 20)* | *Jbaden1* |
| *1* | *4* | *2016-04-20* | * *Broken Wiki links repaired* | *Jbaden1* |
| *2* | *0* | *2016-06-10* | * *Document metadata adapted. Prepared for new macros* * *DTC table removed* * *HMI function added as a chapter (details still to be refined)* * *Signal / Parameter IDs column deleted interface tables* | *Jbaden1* |
| *2* | *1* | *2016-07-14* | * *Converted to SysML diagrams* * *HMI section further elaborated* * *Template version added to footer* * *Dedicated Startup / Shutdown sections removed (only hints added)* * *Data Dictionary reworked and Signal / Parameter IDs column re-introduced* | *Jbaden1* |
| *2* | *2* | *2016-12-07* | * *Minor formatting changes* | *Jbaden1* |
| *3* |  |  | *Skipped to synchronize with Specification\_Macros.dotm* |  |
| *4* |  |
| *5* | *0* | *2017-01-13* | * *Meta data updated for specification macros, version 3.1* * *SW Unit chapter removed for the time being* * *Green boxes added for user hints* | *Jbaden1* |
| *5* | *1* | *2017-01-18* | * *Some additional hints.* * *Hyperlinks highlighted in hints* | *Jbaden1* |
| *6* | *0* | *2017-04-28* | * *Editorial change. Hints added to chapter 4.1.4* * *Chapter “Traceability Matrix” removed* | *Jbaden1* |
| *6* | *0* | *2018-04-28* | * *CR69/63: New chapters added for Functional Safety (FTTI and Technical Safety Requirements)* * *CR53: New coversheet + additional meta-data* * *CR76: merge sections for configuration and for calibration parameters into one on Function Level* | *Jbaden1* |
| *6* | *0* | *2018-08-06* | * *CR66: Fix version numbering in footer of Function Spec* | *Jbaden1* |
| *6* | *0* | *2018-09-28* | * *Broken links to RE Wiki repaired* | *Jbaden1* |
| *6* | *0* | *2018-10-31* | * *Minor corrections on cover sheet and in footer to be more GIS compliant and VSEM aligned* * *“Overview” and “Description” exchanged in headings (following common sense)* | *Jbaden1* |
| *6* | *0* | *2018-11-12* | * *Explanatory text in Variants” section revised* * *Functional Safety modifications as agreed with FuSa core team (Baseline: November 2018 Dearborn On-Site)* | *Jbaden1* |
| *M* |  | *2019-04-02* | * *Initial version of SysML report template* | *snuesch* |
| *M* |  | *2019-04-05* | * *Improved dialog boxes to select function group* | *snuesch* |
| *M* |  | *2019-04-26* | * *Improved function interfaces (support of additional elements (e.g., send signal action, add structural feature action, merge node, decision node, activity parameter nodes, etc.) and pins)* | *snuesch* |
| *N* |  | *2019-08-19* | * *For each function now also requirements satisfied by activity parameter nodes and function outputs are populated.* | *snuesch* |
| *N* |  | *2019-08-21* | * *Improved glossary and acronym tables* | *snuesch* |
| *N* |  | *2019-09-20* | * *Updated Function Interfaces tables with better wording. Added a report template variable that allows to disable senders and receivers. Sorted requirements by ID.* | *snuesch* |
| *N* |  | *2019-09-27* | * *Green hints now only show up for first function.* * *labelTag variable can be used to filter revision history.* | *snuesch* |

# Appendix

## Data Dictionary

### Logical Signals

**#Macro:** [Add Ins -> Add Requirement macro](http://wiki.ford.com/display/RequirementsEngineering/Adding+a+Logical+Signal+or+Parameter) (select “Logical Signal” as type)

OperationStatus

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

PDLC Request

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

PDLC Zone Status

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

PSDS Status

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

PSDSMode

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

UserPDLC\_Request

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

UserPSDS\_Mode\_Request

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

VisualDisplaySyncStatus

|  |  |  |
| --- | --- | --- |
| **ASIL** | |  |
| **Encoding Type Name** | |  |
| Note: An encoding is either discrete or continuous. Delete fields below which are not needed | | |
| **Value**  (Continuous Encoding) | Min Value |  |
| Max Value |  |
| Resolution |  |
| Offset |  |
| **Value**  (Discrete  Encoding) |  |  |
| **Unit** | |  |

### Logical Parameters

**#Macro:** [Add Ins -> Add Requirement macro](http://wiki.ford.com/display/RequirementsEngineering/Adding+a+Logical+Signal+or+Parameter) (select “Logical Parameter” as type)

### Encoding Types

**#Macro:** [Add Ins -> Add Requirement macro](http://wiki.ford.com/display/RequirementsEngineering/Adding+an+Encoding+Type) (select “Encoding Type” as type)

## Glossary

**#Hint**: Terms, concepts and abbreviations used in the document shall be defined and illustrated here. Note that changes to terms and/or concepts described in this section tend to cause major updates to this document.

The tables below have feature specific definitions and abbreviations. For additional, non-feature specific terms please refer to the [RE Glossary](http://wiki.ford.com/display/RequirementsEngineering/Glossary?src=contextnavpagetreemode)

### Definitions

**#Hint:** The table below has definitions and abbreviations relevant for the functions in this document. For additional terms please refer to the [RE Glossary](http://wiki.ford.com/display/RequirementsEngineering/Glossary?src=contextnavpagetreemode)

No terms specified.

### Abbreviations

No acronyms specified.

Document ends here.