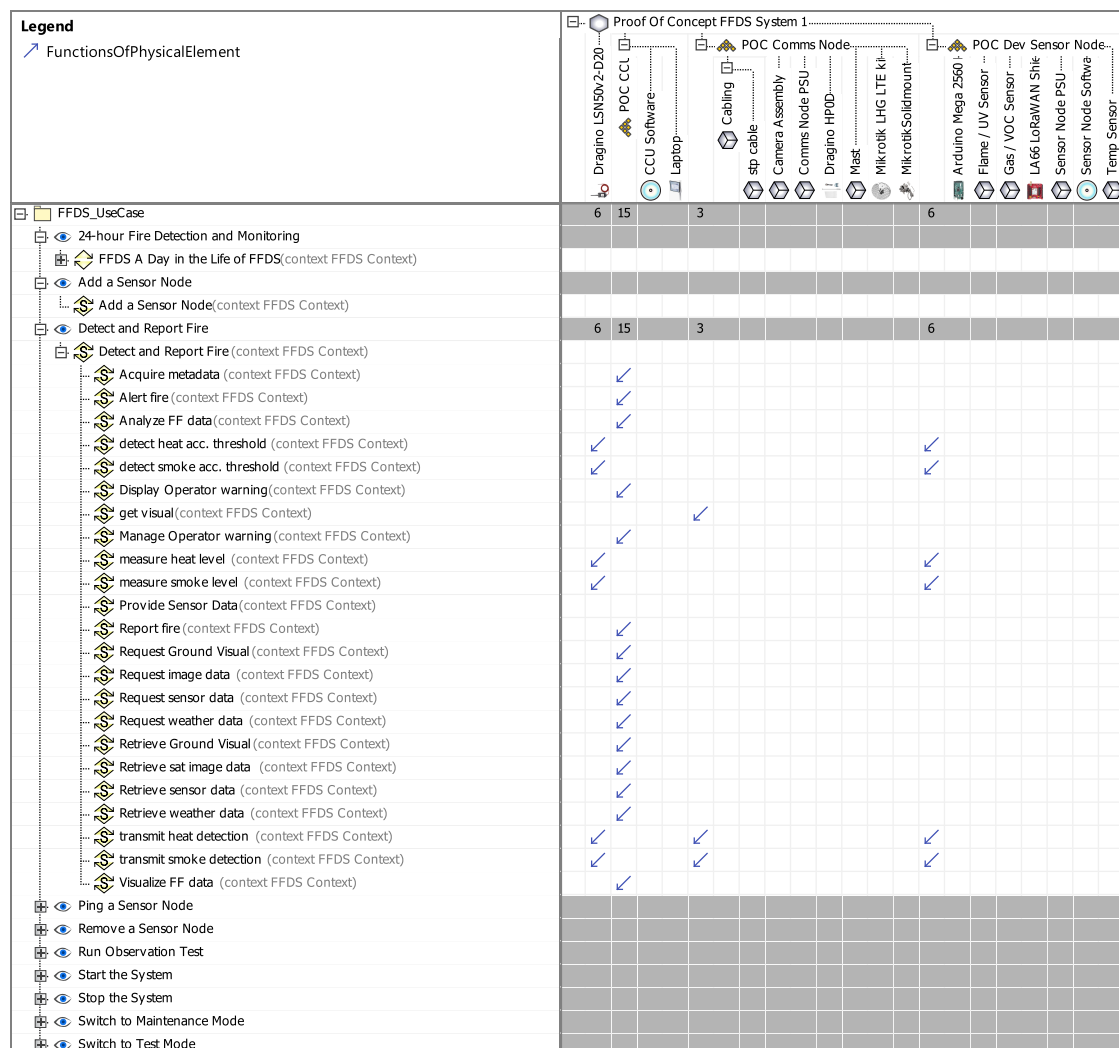


## SAF User Documentation : Physical Functional Mapping Viewpoint

Domain	Aspect	Maturity
Physical	Traceability & Mapping	 released

### Example



### Purpose

The Physical Functional Mapping Viewpoint supports the analysis of the assignment (it is derived relationship) of system functions and system partial functions to physical SOI elements.

## Applicability

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The Physical Functional Mapping Viewpoint supports the "Design Definition Process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2023 [§2.3.5.5] and contributes to the artifact "Traceability Mapping".

Furthermore, the Physical Functional Mapping Viewpoint supports the "Allocation and Partitioning of Functional Entities to Physical Entities" activities.

## Presentation

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A FBS\_to\_PBS mapping matrix featuring

- Functional Breakdown Structure (FBS)
- Physical Breakdown Structure (PBS)
- mapping (it is a derived relationship) from system functions and system partial functions to physical SOI elements

## Stakeholder

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- [Hardware Developer](#)
- [IV&V Engineer](#)
- [Mechanic Developer](#)
- [Software Developer](#)
- [System Architect](#)

## Concern

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- [What is the mapping of functions to the physical SOI physical architecture?](#)
- [Which system functions need to be tested in IV&V activities?](#)

## Profile Model Reference

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The following Stereotypes / Model Elements are used in the Viewpoint:

- Allocate [SysML Profile]
- Attribute "function" of SAF\_PhysicalItem referencing SAF\_SystemFunction
- [SAF\\_FunctionAction](#)
- [SAF\\_PhysicalElement](#)
- [SAF\\_PhysicalHardwareElement](#)
- [SAF\\_PhysicalSoftwareElement](#)

- [SAF\\_SPV08b\\_View](#)
- [SAF\\_SystemFunction](#)
- [SAF\\_SystemPartialFunction](#)

## Input from other Viewpoints

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### Required Viewpoints

- [Logical Structure Viewpoint](#)
- [Physical Structure Viewpoint](#)
- [Logical Functional Mapping Viewpoint](#)

### Recommended Viewpoints

- [System Functional Breakdown Structure Viewpoint](#)