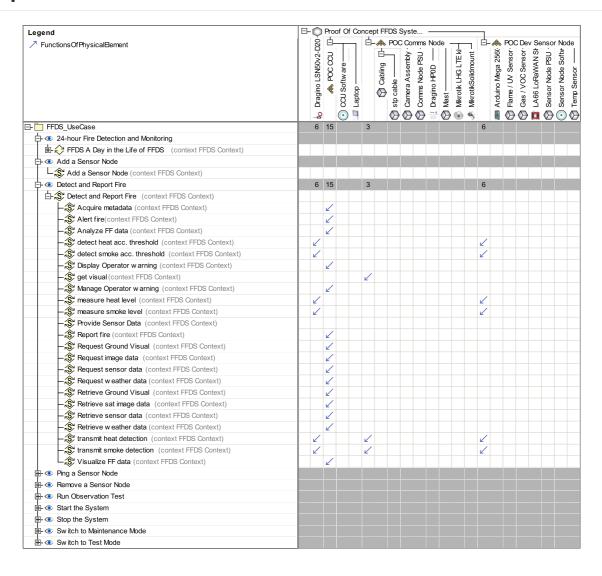
# SAF User Documentation: P8\_PFUM Physical Functional Mapping Viewpoint

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**

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**

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

- · Hardware Developer
- IV&V Engineer
- Mechanic Developer
- Software Developer
- System Architect

#### Concern

- What is the mapping of functions to the physical SOI physical architecture?
- Which system funcions need to be tested in IV&V activities?

#### **Profile Model Reference**

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

- Allocate [SysML Profile]
- Attribute "function" of SAF PhysicalItem referencing SAF SystemFunction
- SAF FunctionAction
- SAF P8 PFUM
- SAF PhysicalElement
- SAF PhysicalHardwareElement

- SAF\_PhysicalSoftwareElement
- SAF\_SystemFunction
- SAF\_SystemPartialFunction

# **Input from other Viewpoints**

## **Required Viewpoints**

- Logical Structure Definition Viewpoint
- Physical Structure Definition Viewpoint
- Logical Functional Mapping Viewpoint

# **Recommended Viewpoints**

• System Functional Breakdown Structure Viewpoint