

# SAF User Documentation : Physical Functional Mapping Viewpoint

Domain	Aspect	Maturity
Physical	Traceability & Mapping	 under construction

## Example

*none*

## Purpose

The Physical Functional Mapping Viewpoint analyses the assignment of the System Functions and the System Partial Functions to the Physical SOI Elements.

## Applicability

The Physical Functional Mapping Viewpoint supports the "System Architecture Definition process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2015 .

## Presentation

A Physical Functional Mapping Matrix featuring

- the call behavior action representing usage of System Functions
- Physical SOI Elements or Physical SOI
- a derived relationship

## Stakeholder

- [Hardware Developer](#)
- [Software Developer](#)
- [System Architect](#)

## Concern

- What is the allocation of functions to the physical architecture?
- Which functions and services need to be implemented in SW?
- Which functions need to be realized by HW?

## Profile Model Reference

---

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

- Allocate [SysML Profile]
- [SAF\\_FunctionAction](#)
- [SAF\\_PhysicalElement](#)
- [SAF\\_PhysicalHardwareElement](#)
- [SAF\\_PhysicalSoftwareElement](#)
- [SAF\\_SPV08b\\_View](#)
- [SAF\\_SystemFunction](#)
- [SAF\\_SystemPartialFunction](#)

## Input from other Viewpoints

---

### Required Viewpoints

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

### Recommended Viewpoints

- [System Process Viewpoint](#)
- [System Functional Refinement Viewpoint](#)