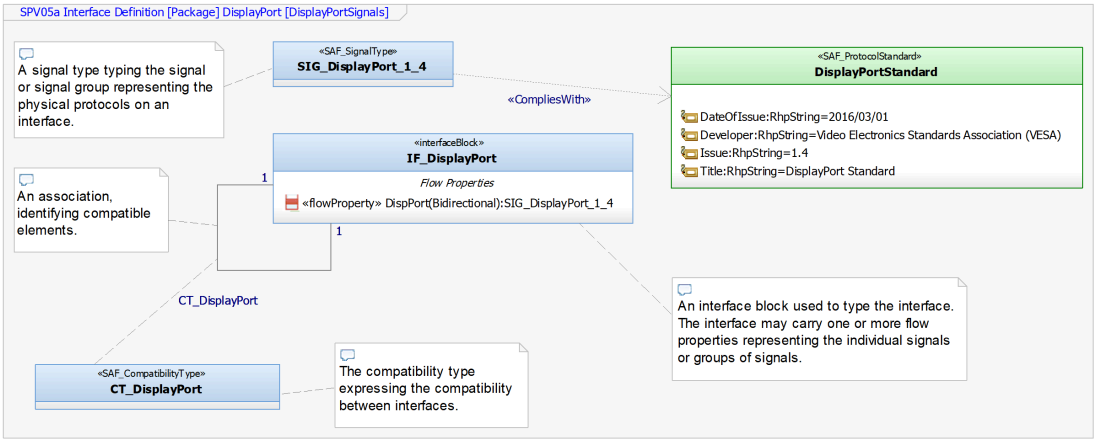
Physical Interface Definition Viewpoint

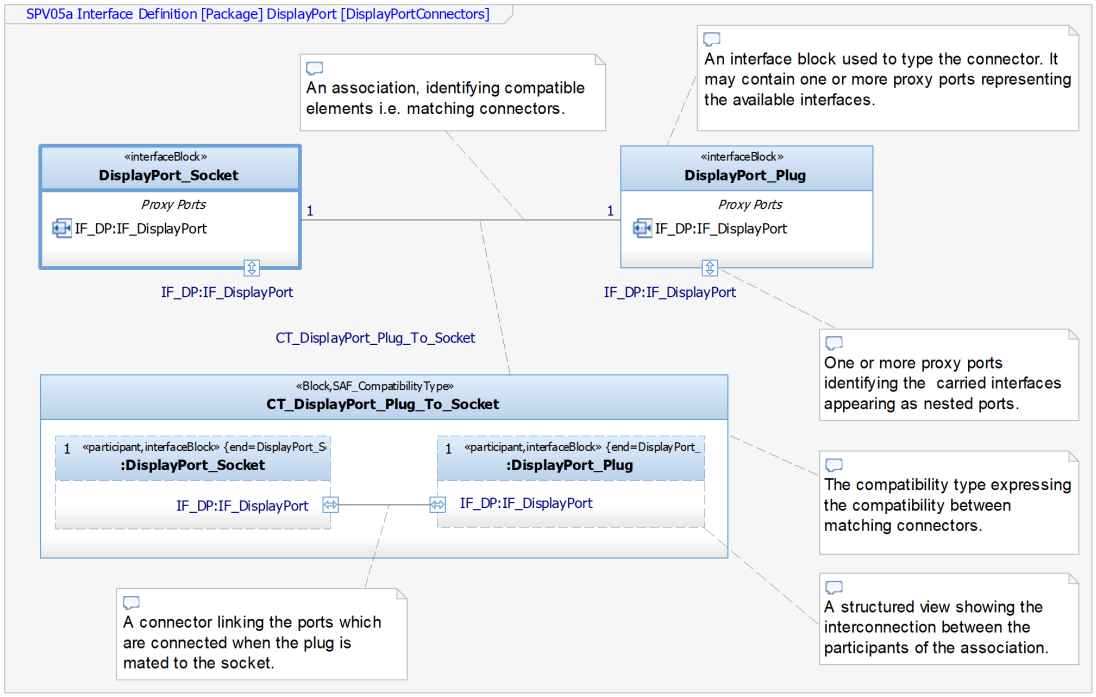
Domain	Aspect	Maturity
Physical	Interface	Proposed

Example

To define signal types and their compatibility



to define connectors and their compatibility



Purpose

The Physical Interface Definition viewpoint defines the single physical signal, interface and connector types and defines the compatibility between those items. Any information necessary to understand an interface is provided with each interface, forming the information base for the generation of an Interface Control Document. The defined signal, interface and connector types are subject for reuse. In a more developed MBSE environment, the interface definitions may be available as library.

Applicability

The viewpoint is applied as a starting point in modelling the details of physical interfaces. The defined signal, interface or connector types are used to type the proxy ports of the system elements representing a physical connection. The viewpoint does not use any elements from other viewpoints instead it defines the basics for use in other viewpoints.

Stakeholder

- System Architect
- Hardware Developer

Concern

- What are the basic signal types?
- What are the basic interface types?
- What are the basic connector types?
- What are the properties of physical interfaces?
- Which documents (e.g. interface specifications) are associated with a specific interface?

Presentation

The following artifact(s) support the modeling activities:

- SAF SPV05a Physical Interface Definition
- SAF SPV05a Physical Connector Definition
- SAF SPV05a Physical Interface Overview table listing all the defined interfaces

Profile Model Reference

- SAF_SPV05a_InterfaceDefinition
- InterfaceBlock (SysML)
- SAF_CompatibilityType
- SAF_SignalType

Input from other Viewpoints

Required Viewpoints

none

Recommended Viewpoints

none