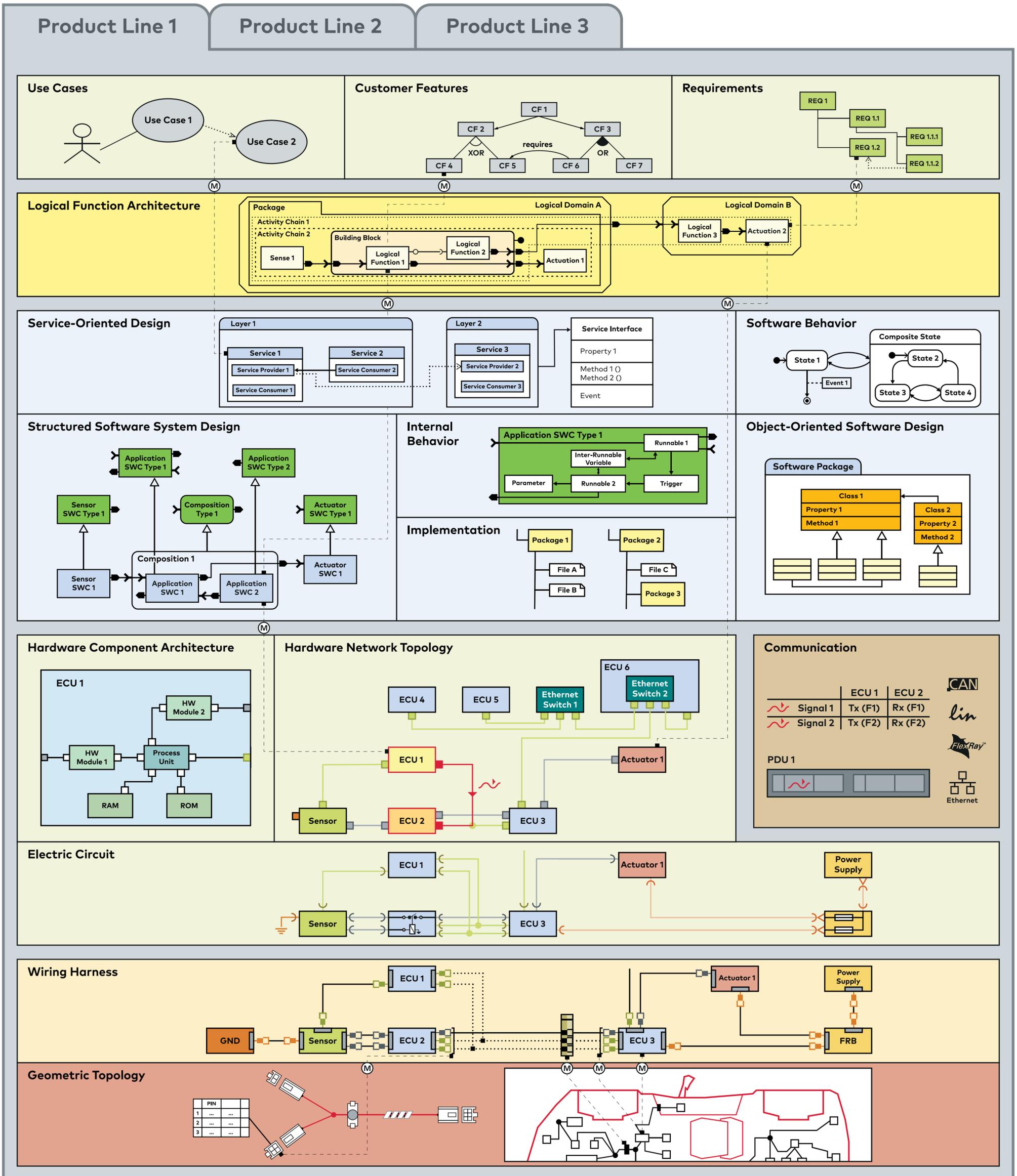


PREvision Model-Based Electric/Electronic Development

Infographic Modeling Layers

You will find know-how, tools and services for model-based E/E development at:
www.vector.com/prevision



Requirements
System designers define use cases and develop customer features and corresponding requirements. Via links and mappings, the implementation of use cases, customer features, and requirements can be traced at any time.

Logical Function Architecture
In the logical function architecture, the requirements are implemented by logical functions that are connected via ports and interfaces. The resulting function network is the basis for the technical development of hardware and software.

Software/Service Architecture
In the system and software architecture, software components and their interfaces are modeled. A service-oriented design is possible as well as both a structured software system design and an object-oriented design.

Communication
On the communication layer, one defines how software components exchange data across hardware borders. PREvision supports all relevant network technologies including CAN, CAN FD, LIN, FlexRay, and Ethernet.

Electric Circuit (Electronics Logic)
In the electric circuit diagram, the electric characteristics of the components and their interconnections are defined. Also, the internal electrical design of components with fuses and relays can be modeled.

Wiring Harness
On the wiring harness layer, one defines the physical details of the wiring harness including pins, connectors, cables, and inline connectors.

Geometry
In the vehicle geometry, installation spaces and locations are defined or imported via 3D KBL data. Then routing paths via topology segments including inline connectors are modeled.

