Benefits of a standardized diagnostic framework

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Development Engineer

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Agenda

- Diagnostics with standards – Motivation
- ODX – ODXplorer
- MCD-3 Server – samMCD3 server
- MVCI-D-PDU-API – HSX
- samtec Diagnostic Framework

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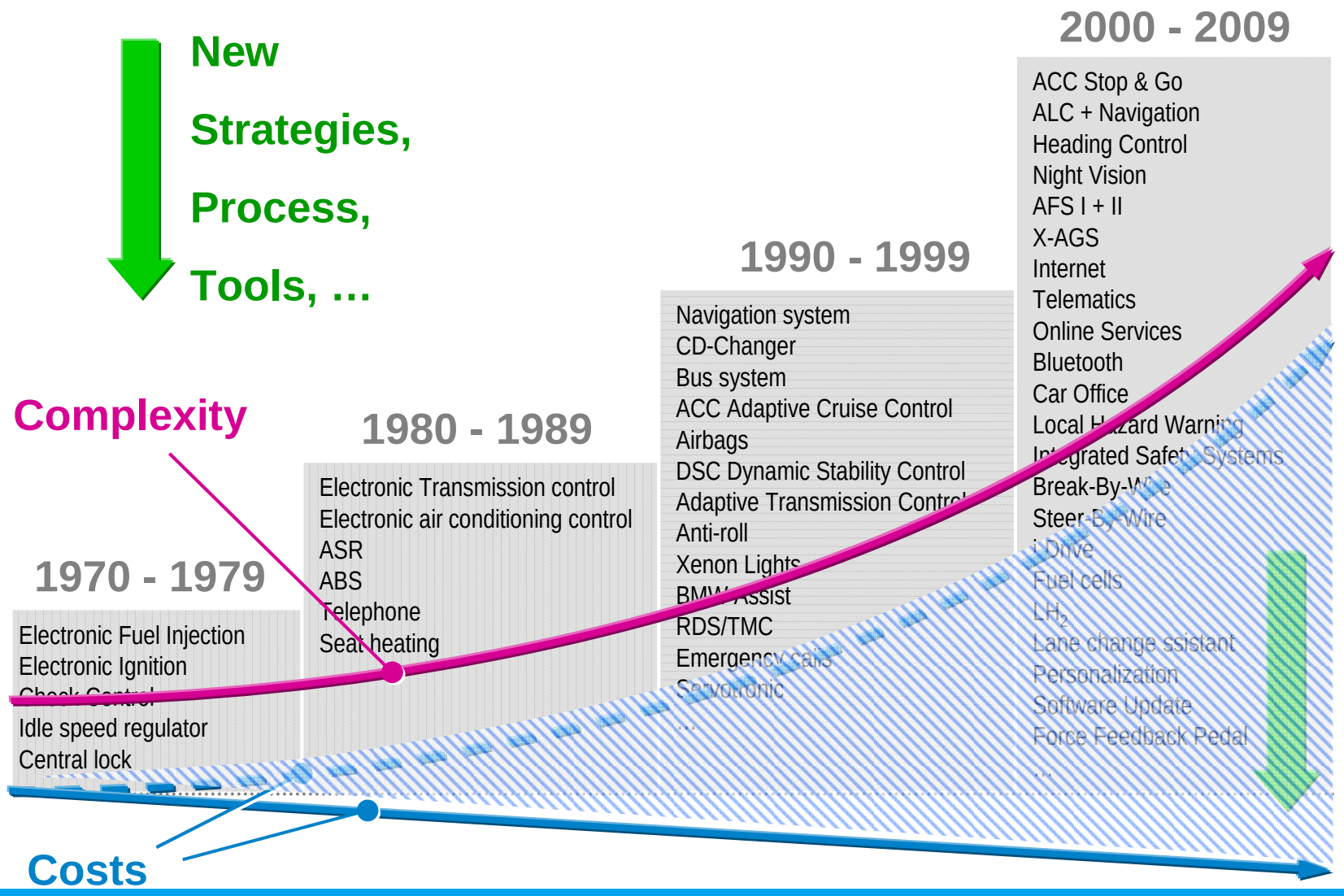
Diagnostics with Standards
Motivation



Source: [2] Hudi; [4] Reichert

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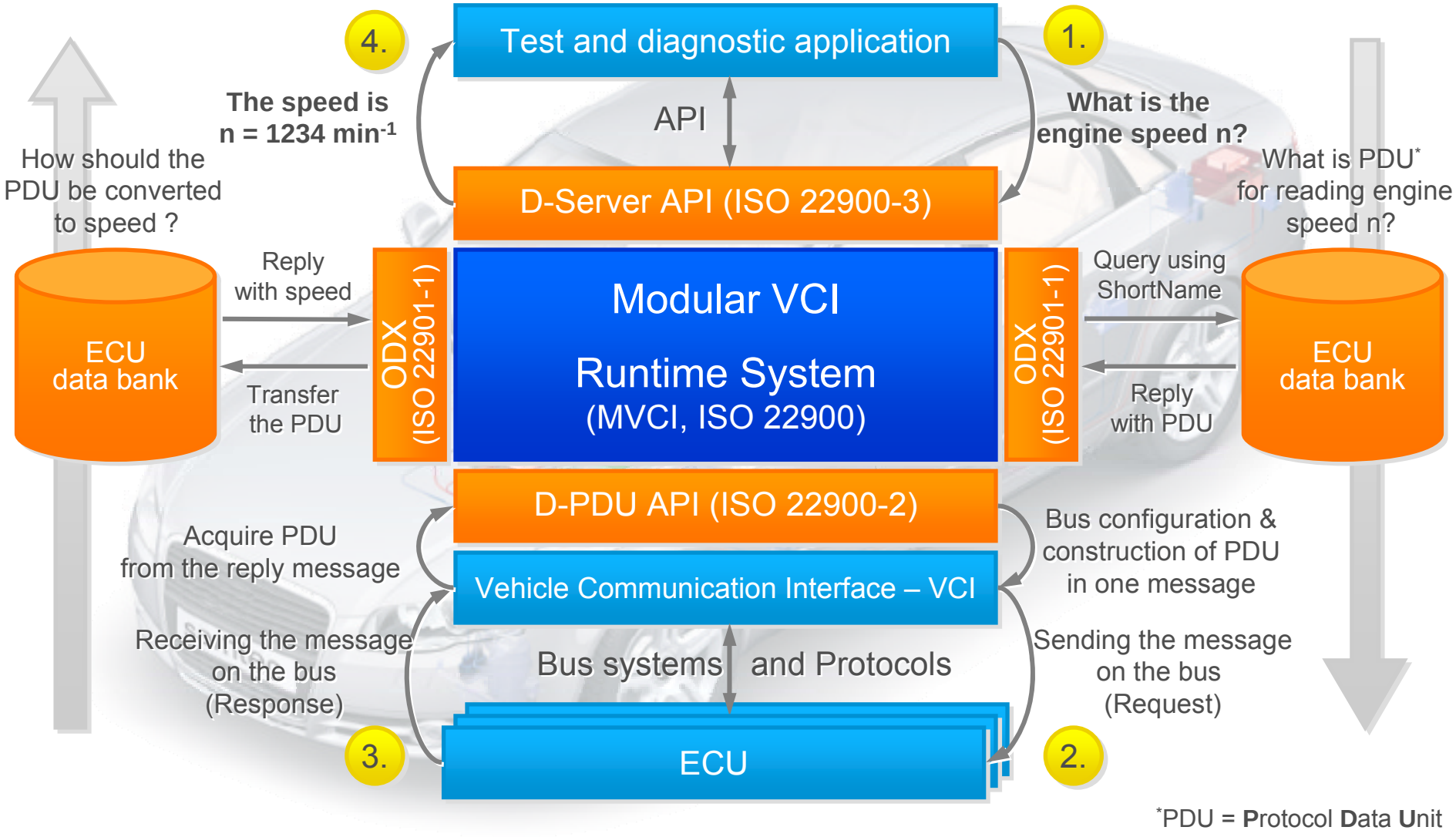
Standardization - „Big Picture“
ASAM MCD (ISO MVCI)



*PDU = **P**rotocol **D**ata **U**nit

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samtec Diagnostic Tools

Development | Production | Quality | Service

samDia
Diagnostic Suite

ODXplorer

User Application

ODX
A2L

samMCD3 Server
ASAM MCD3 3D-API (COM, Java)

samDiaX
Library - ActiveX
Control element

samPDU
MVCI PDU-API - SAE J2534

USB | RS 232 | Ethernet | PCI | wLAN | GPRS/GSM

CF
Standalone
Block-
sequencer

CAN, FlexRay,
LIN, K-Line,
SAE J1708,
SAE J1850

ECU

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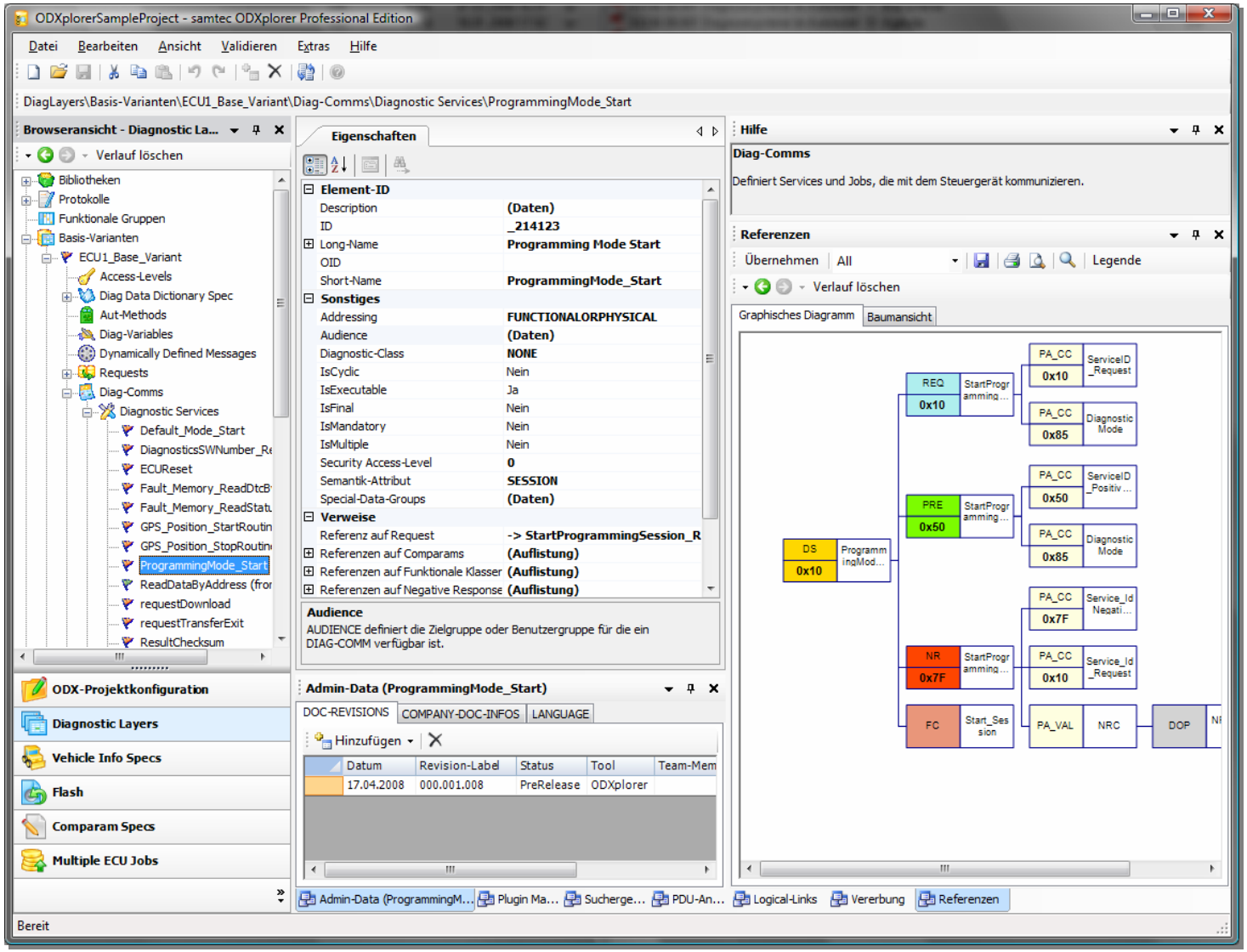
ODXplorer



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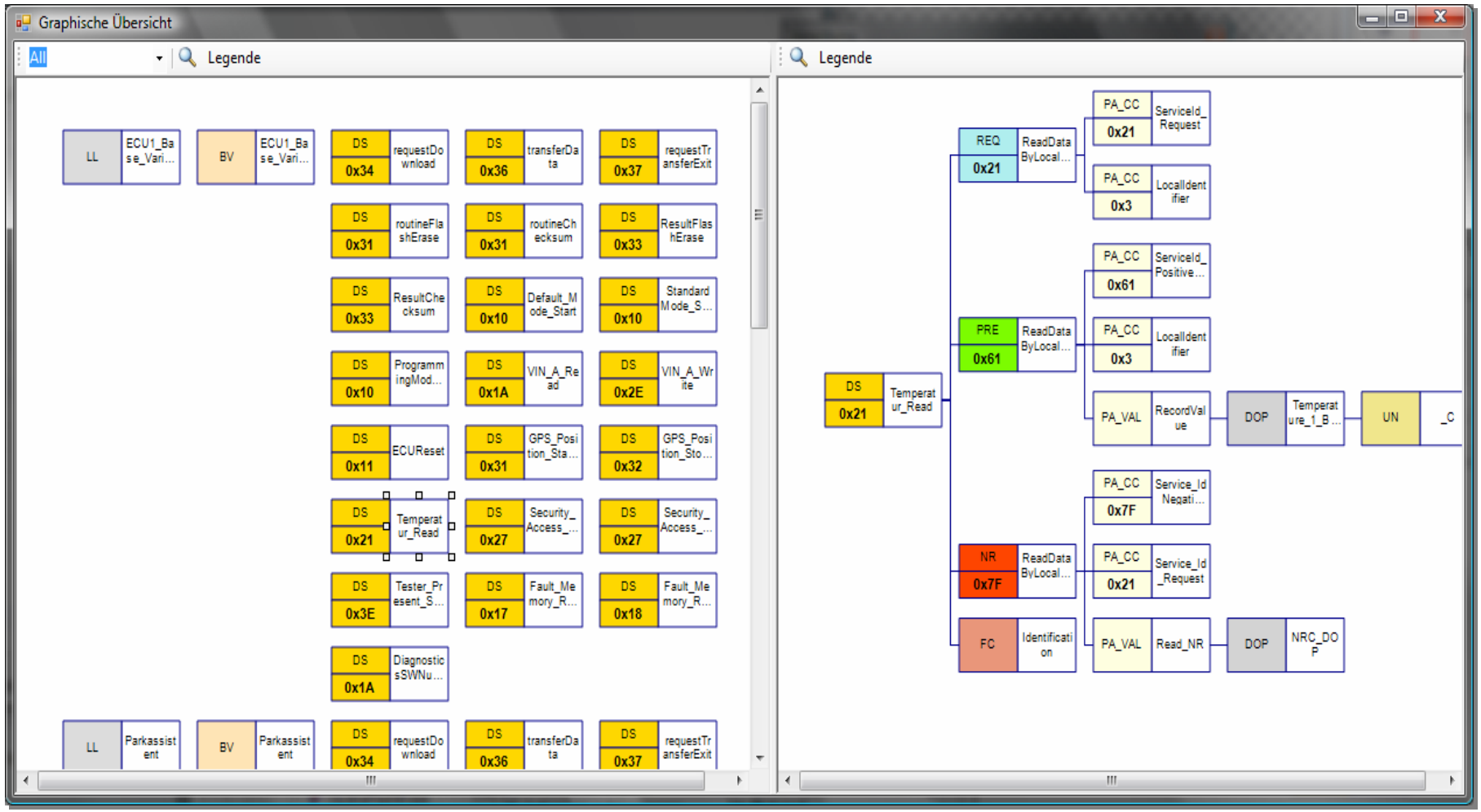

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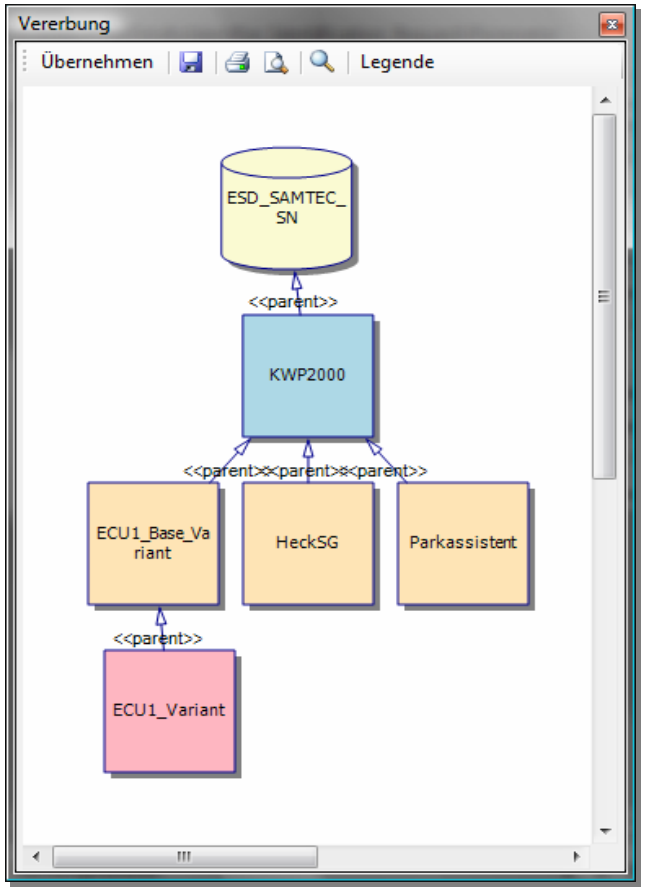

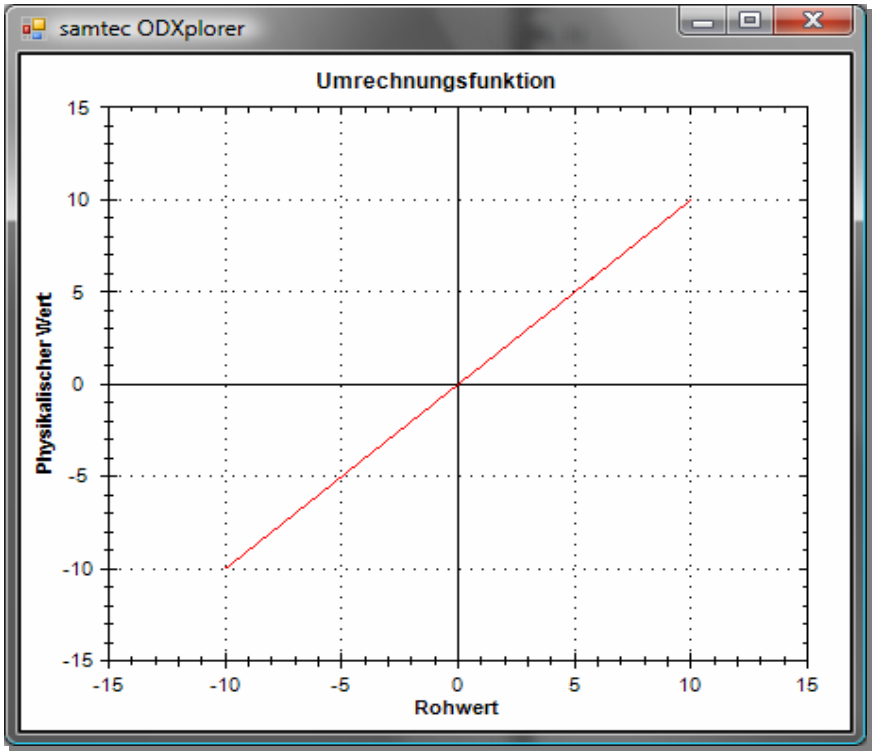

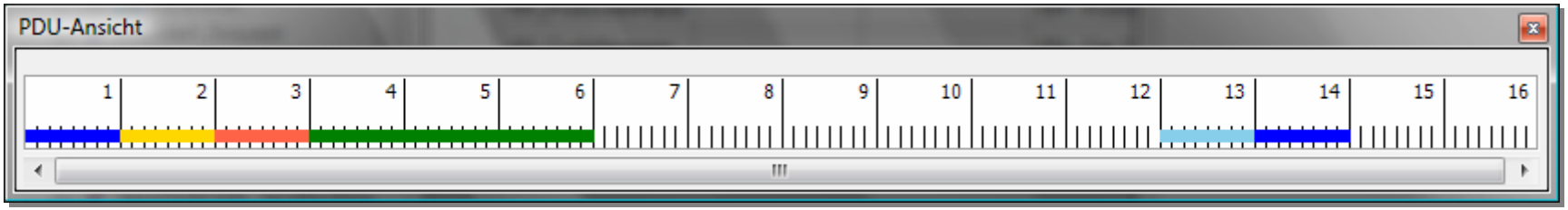

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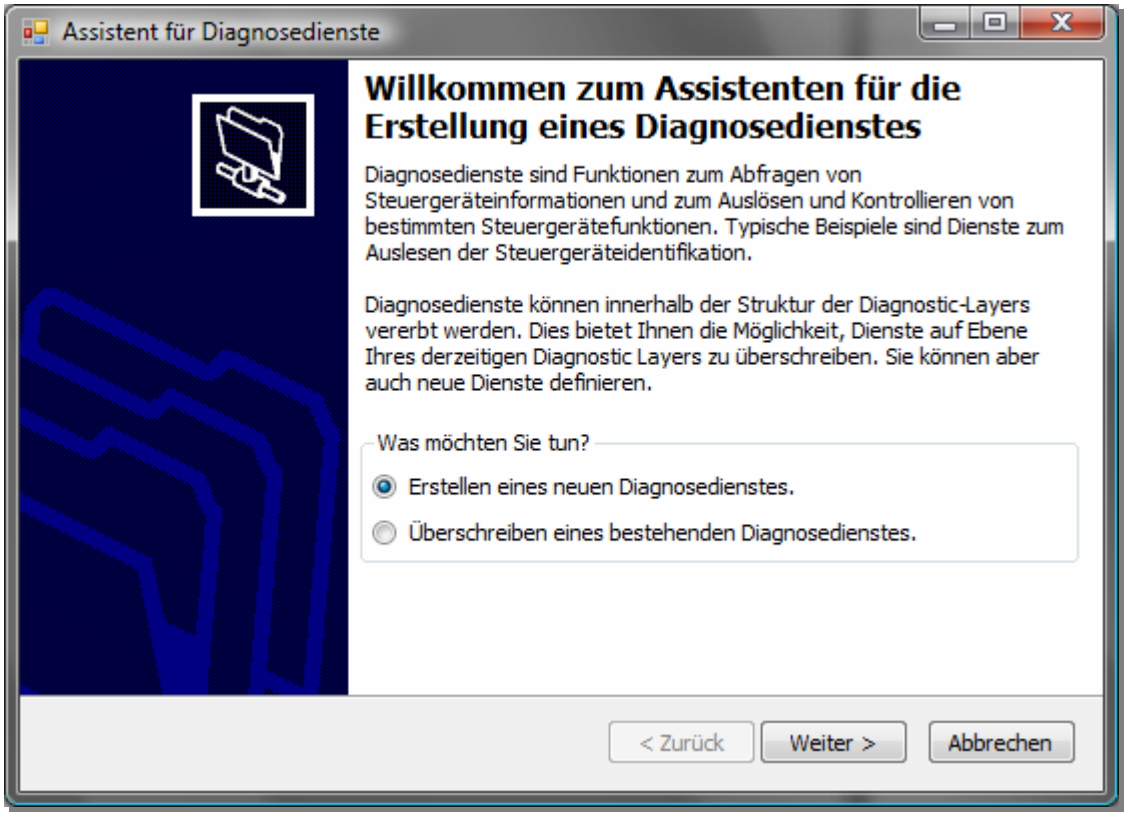

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ODXplorer – Features

- ☑ Direct access to ODX data
- ☑ All diagnostic layers supported, inheritance within layers
- ☑ Automatic generation of element ID’s and ShortNames
- ☑ Integrated checker and plausibility checks
- ☑ Import of third party templates
- ☑ Plug-in Interface

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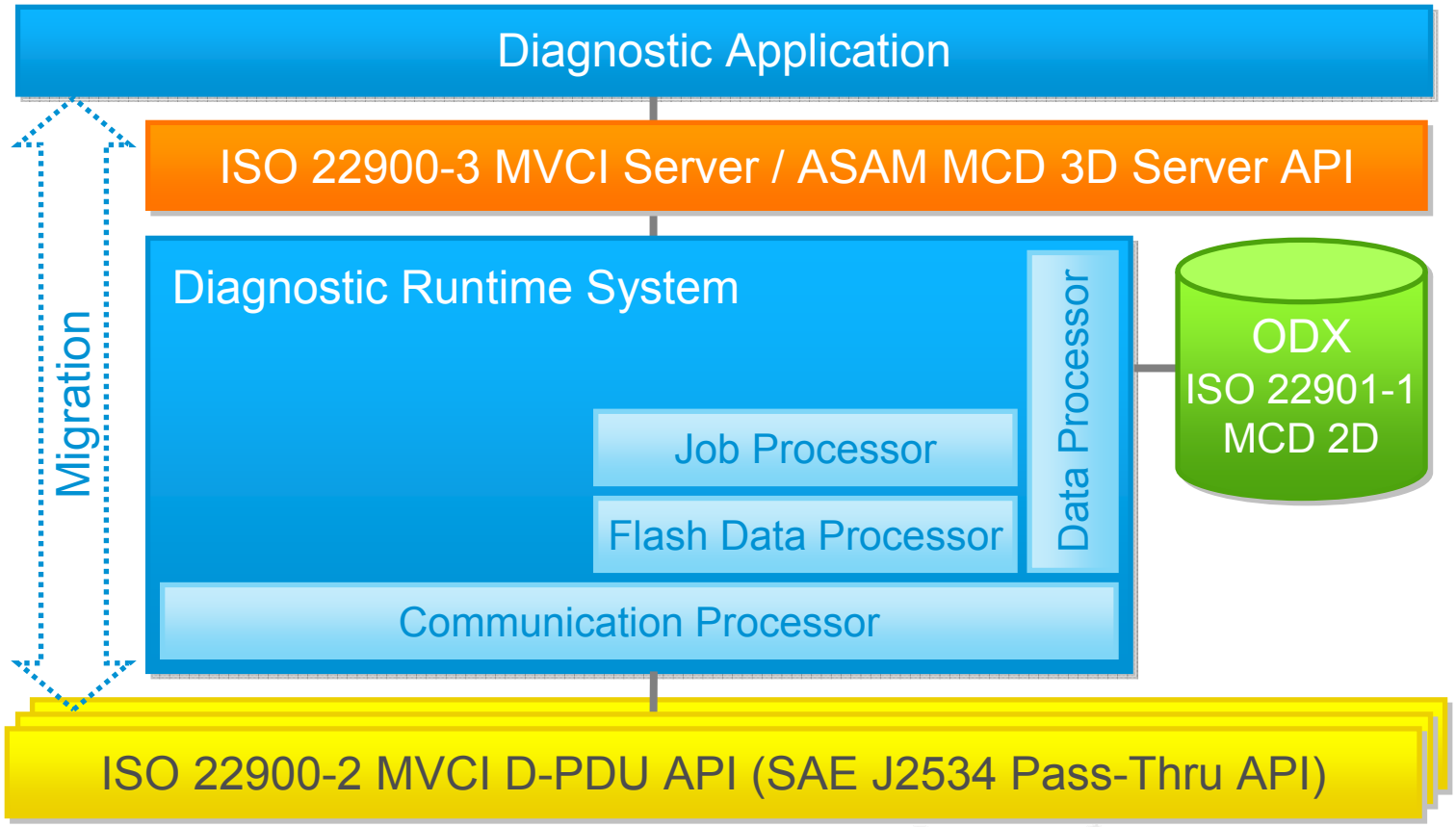
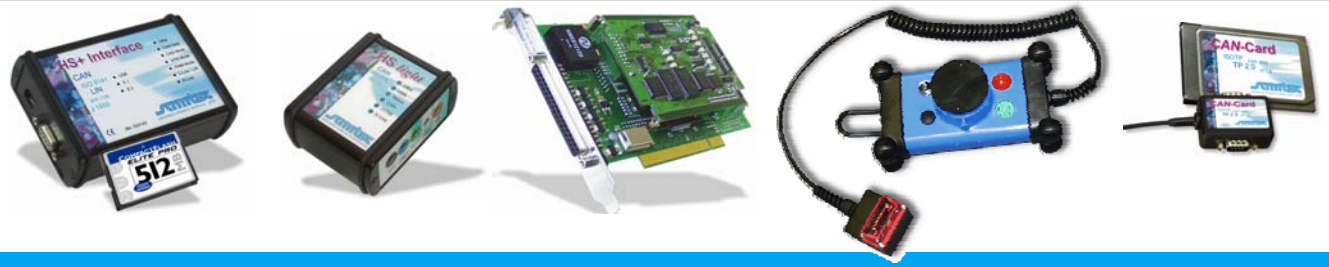
samMCD3 Server





MEMBER of ASAM e.V.

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MVCI D-PDU API
HSX Multibus VCI

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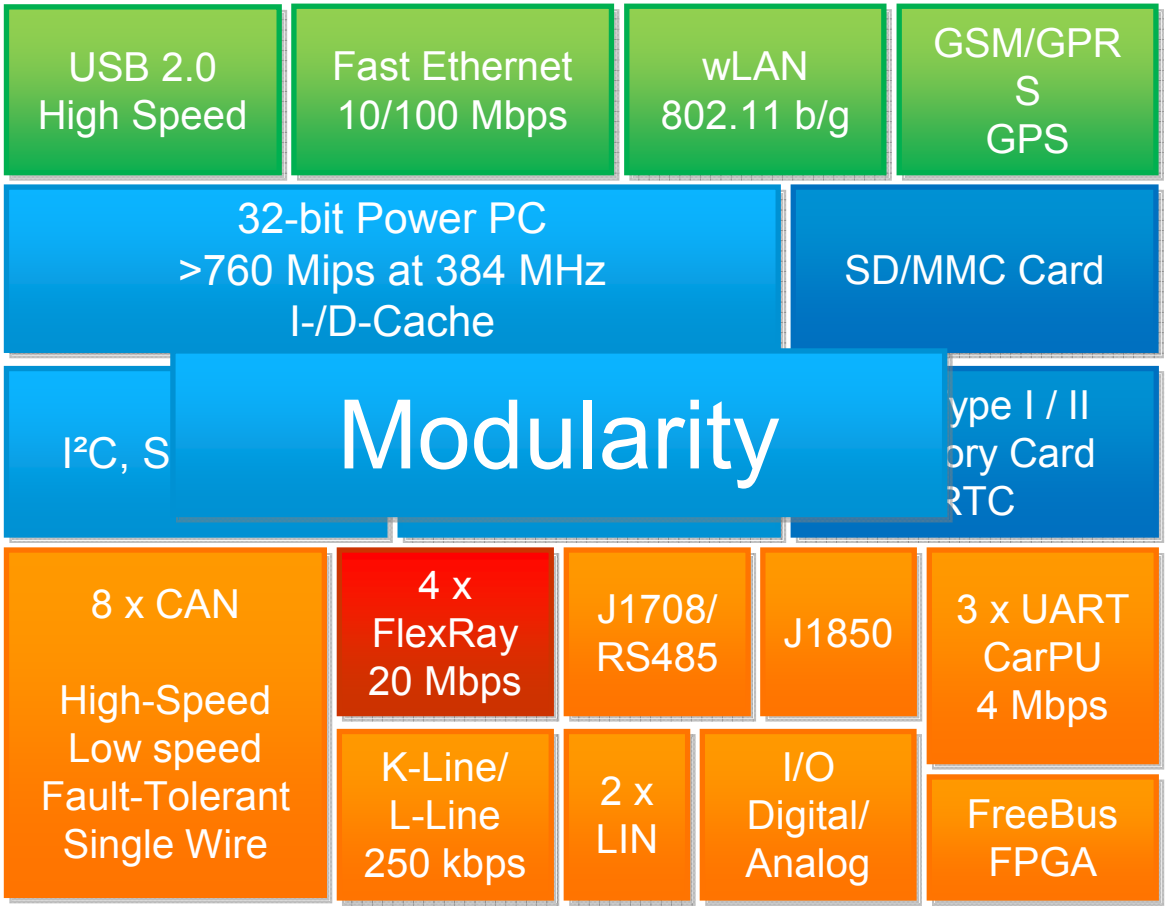
HSX Multibus VCI
Platform



What makes it Special?

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HSX Module - Features

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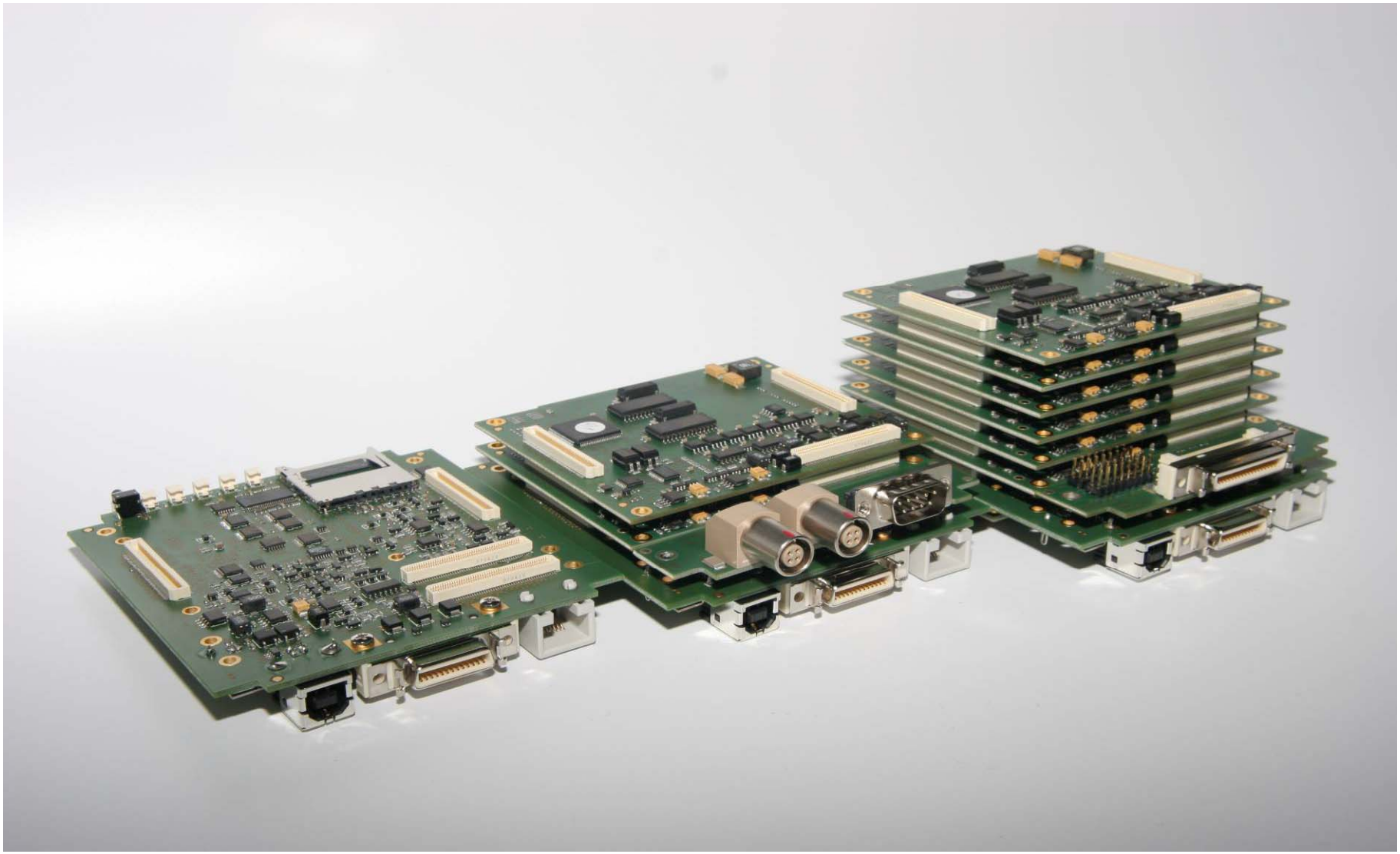
HSX Module - Features



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HSX Module - Features

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HSX Module - Features

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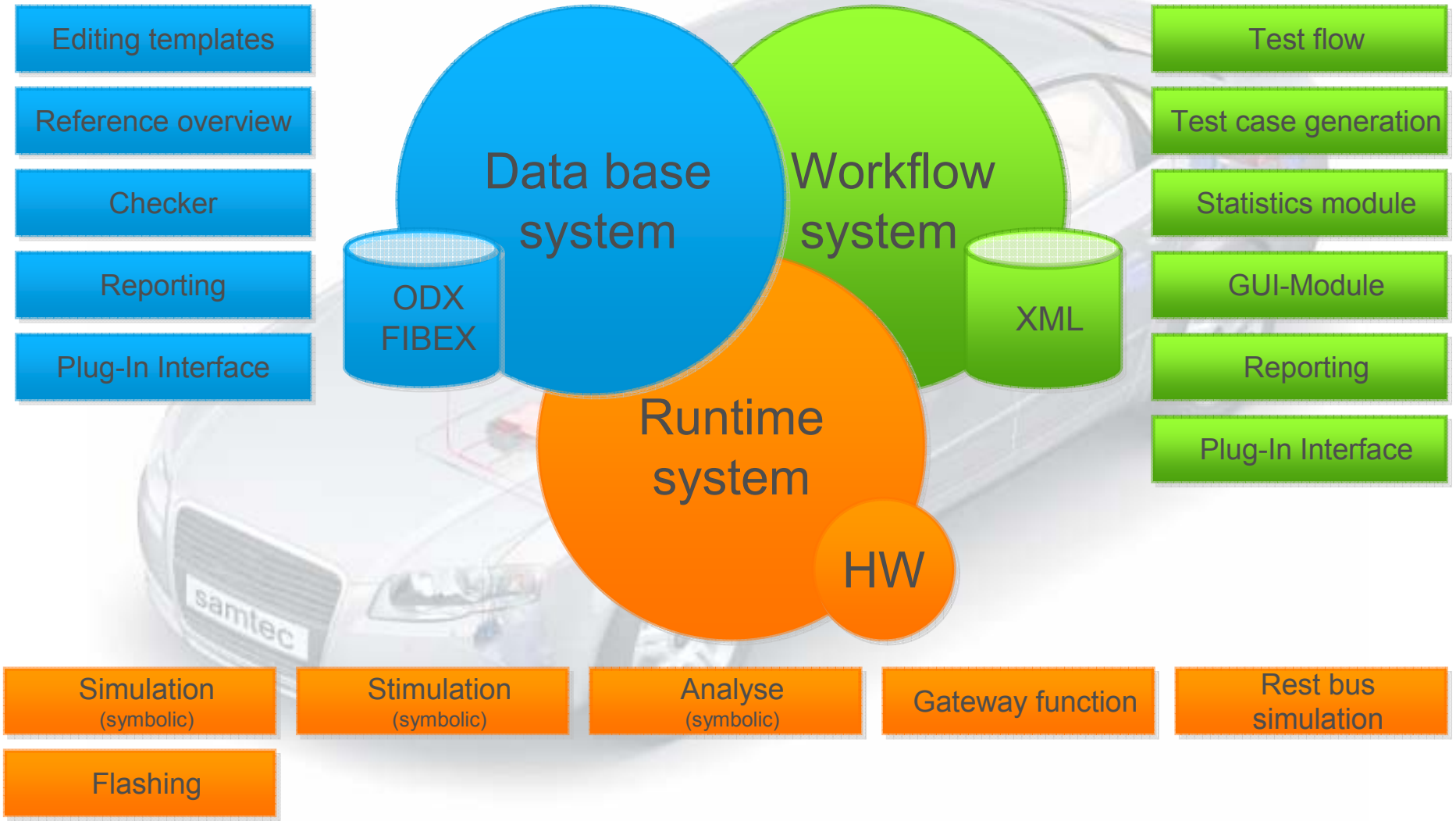
Generation Next!

samtec Diagnostic Framework 2008



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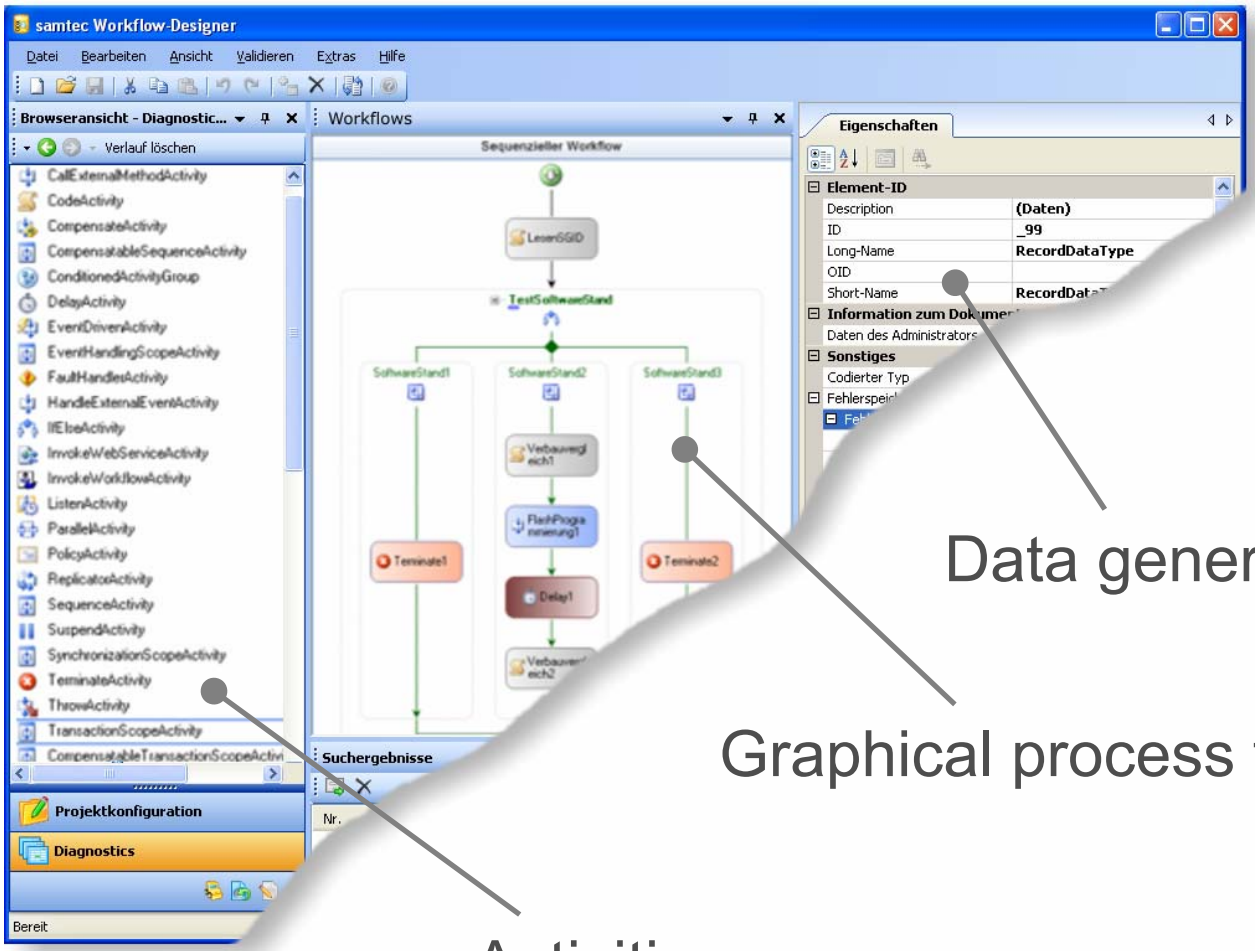
Generation Next!
samtec Diagnostic Workflows



- Complex processes can be generated
- Integrated to a GUI Library
- Based on samtec Diagnostic Framework

Data generation

Graphical process flow

Activities

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Benefits

- ☑ ODX - the “de-facto” exchange standard
- ☑ Re-usability the key
- ☑ Standards “open-up” the market for diagnostic tool suppliers.
- ☑ samtec is a one stop shop!
- ☑ samtec Diagnostic Framework - The icing on the cake!

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Smart. Sensitive. Supporting.

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