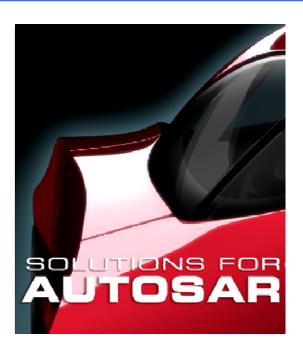




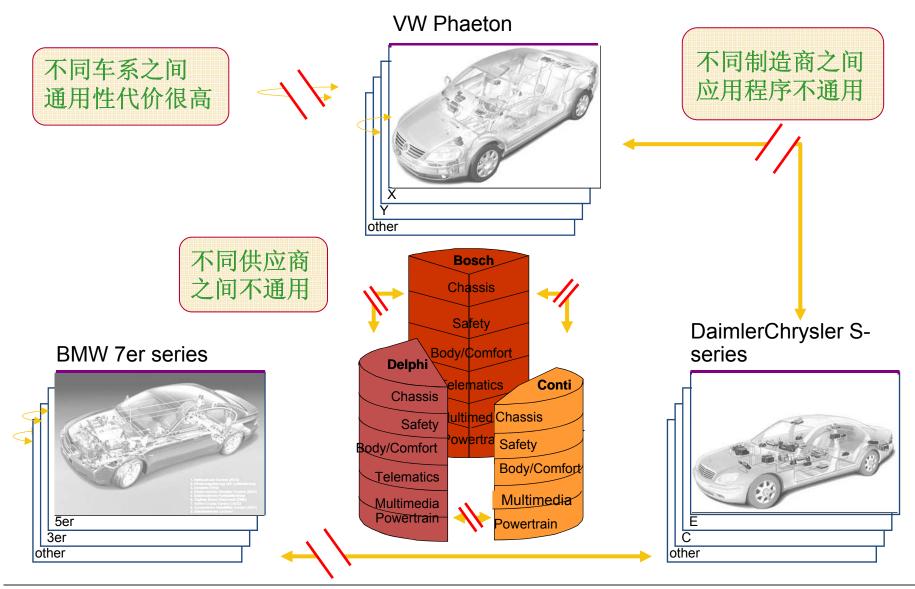
目录

- □AUTOSAR基本概念
- □基础软件(BSW)介绍
- □开发流程
- □AUTOSAR开发工具

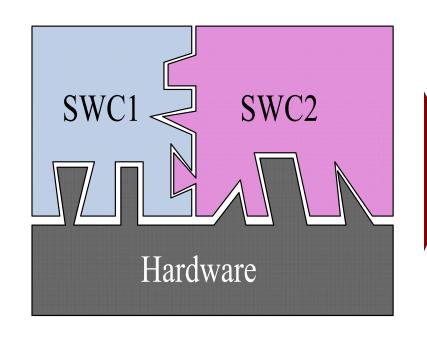


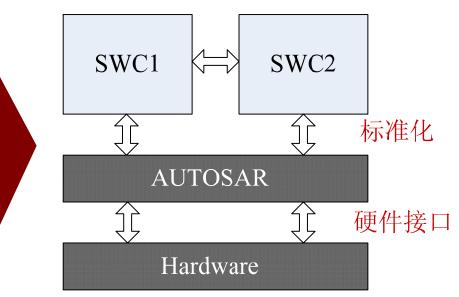


传统软件开发流程







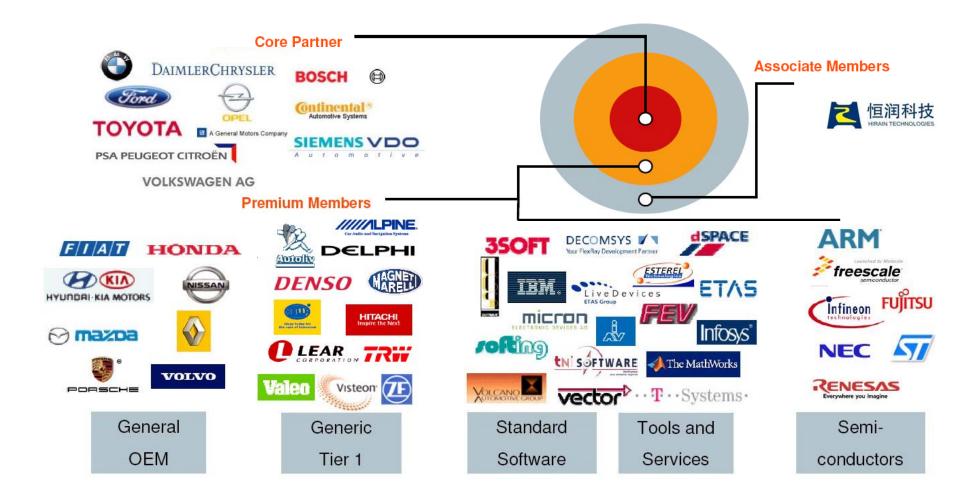


□ AUTOSAR标准

- □ 方法论
- □ 开发流程
- □ 软件接口

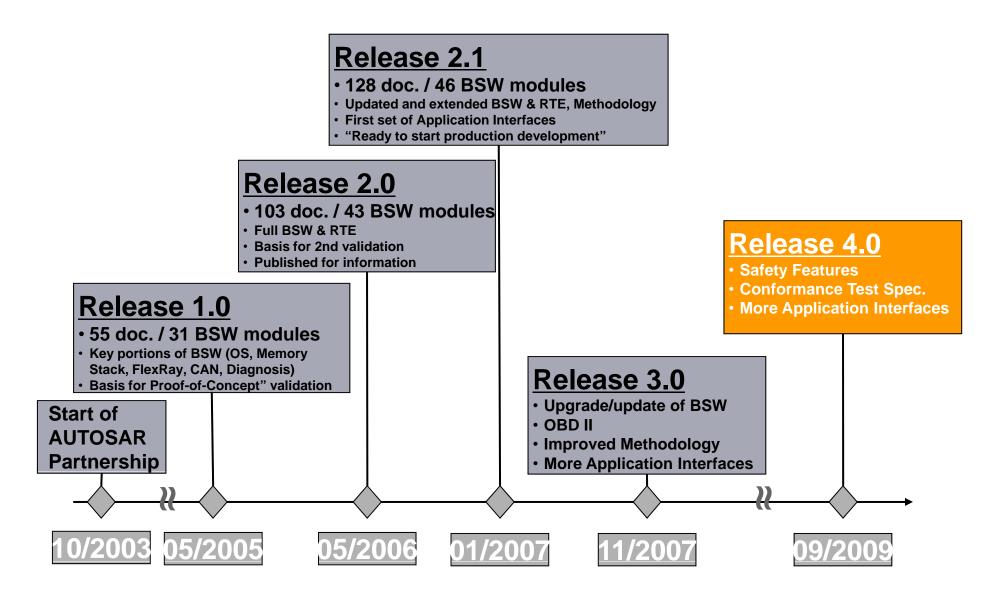


□ AUTOSAR: <u>Automotive Open System Architecture</u>



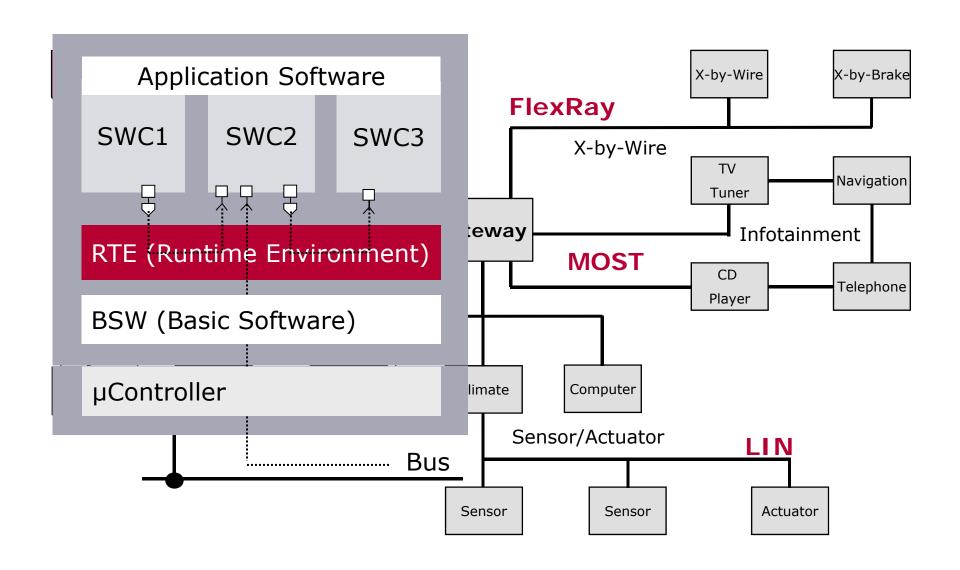


AUTOSAR发展历程





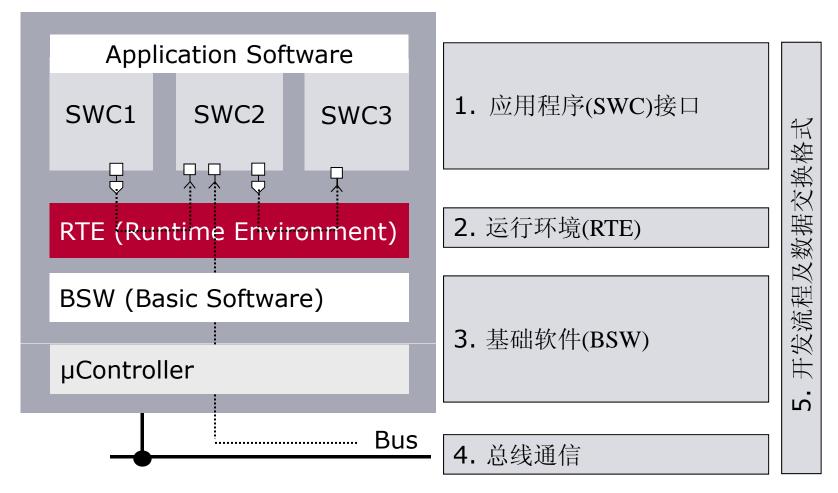
AUTOSAR思想





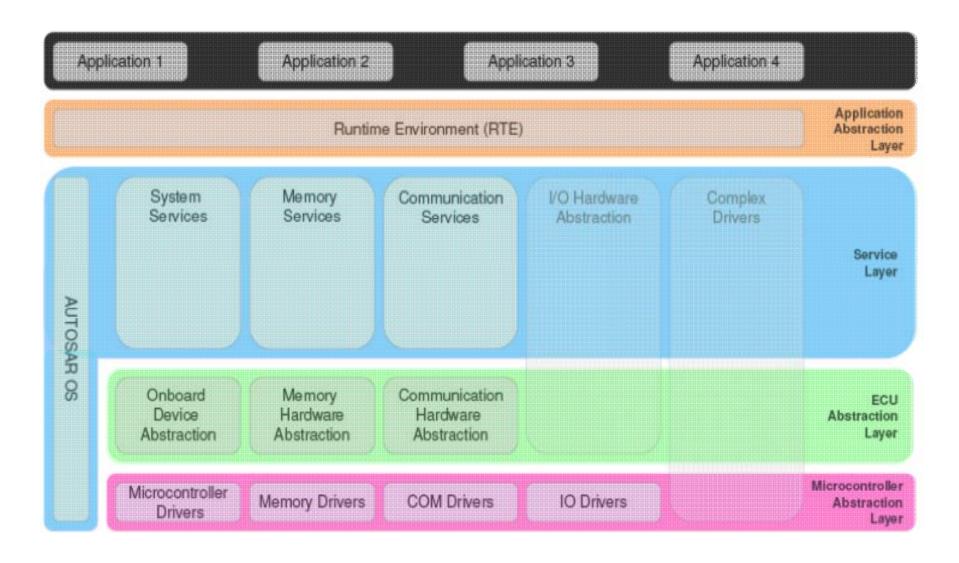
AUTOSAR思想

AUTOSAR provides **standards** for



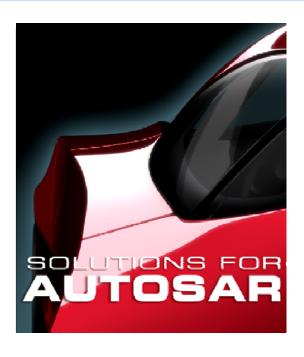


AUTOSAR思想

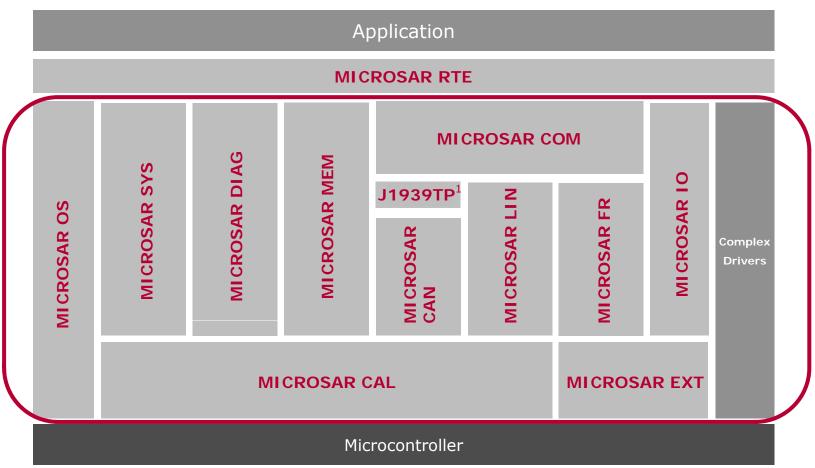




- □AUTOSAR基本概念
- □基础软件(BSW)介绍
- □开发流程
- □AUTOSAR开发工具



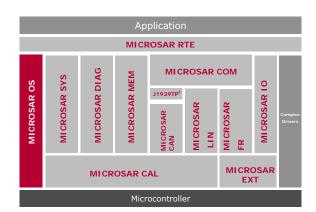




¹Available extensions for AUTOSAR3.0

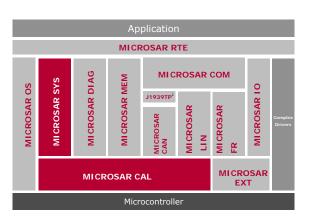


- □ OS Operating System
 - □ 任务调度
 - □内存保护
 - □ 实时监测任务的执行情况





- □ SYS System Services
 - □管理
 - □通信
 - □ ECU启动和停止
 - □ 看门狗
 - □ 特定的诊断模式



COMM

ECUM

CRC

SCHM

DET

WDGM

WDGIF

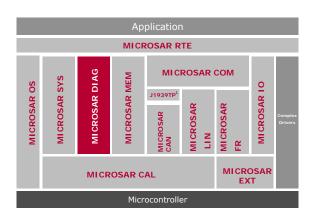
WDGDRV

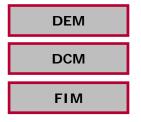
GPTDRV

MCUDRV



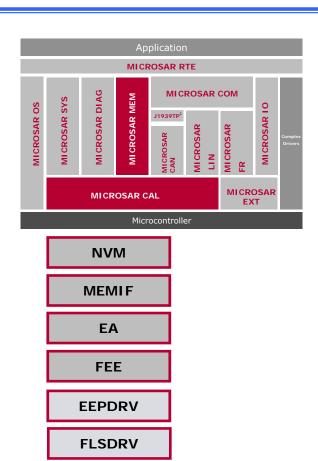
- □ DIAG Diagnostic Services
 - □ 支持诊断协议UDS
 - □ 处理故障记录
 - □ 处理ECU的主动/被动错误状态





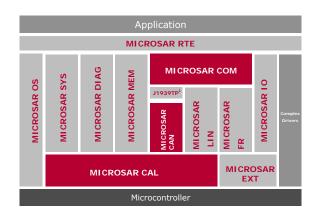


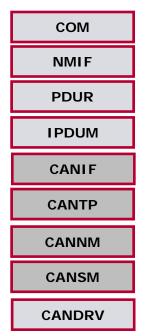
- □ MEM Memory Services
 - □ 非易失性RAM读写
 - □ EEPROM、Flash内存管理
 - □ 支持内部及外扩EEPROM/Flash





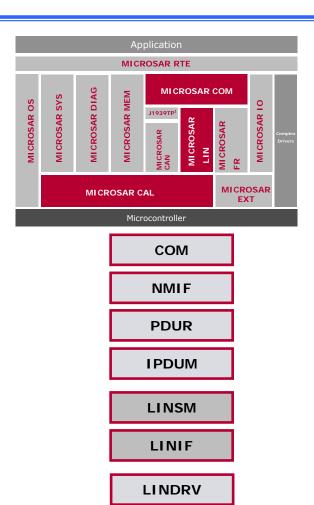
- □ CAN通信协议栈
 - □ CAN通信服务功能
 - □ 发送和接收CAN报文
 - □ 传输协议
 - □ 网络管理
 - □ 收发器管理
 - □ 网关功能





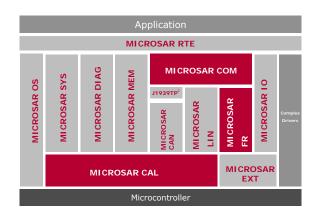


- □ LIN通信协议栈
 - □LIN通信服务功能
 - □ LIN报文收发
 - □ 收发器管理
 - □ 网关功能





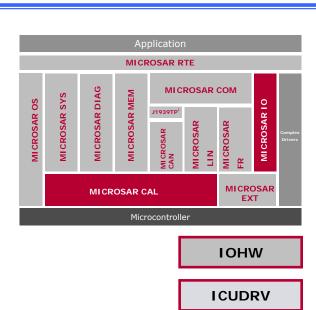
- □ FR FlexRay通信协议栈
 - □ FlexRay通信服务功能
 - □ FlexRay报文收发
 - □ 传输协议
 - □ 网络管理
 - □ 收发器管理
 - □ 网关功能



COM
NMIF
PDUR
IPDUM
FRTP
FRNM
FRSM
FRIF



- □ MCAL 微控制器抽象层
 - □ 提供硬件驱动功能
 - □ 使上层软件可以独立于硬件

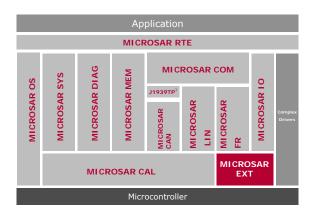




PWMDRV



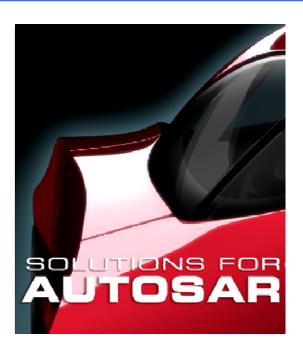
- □ EXT 外部硬件抽象层
 - □ 外部硬件的抽象
 - □ 外扩Flash、EEPROM驱动





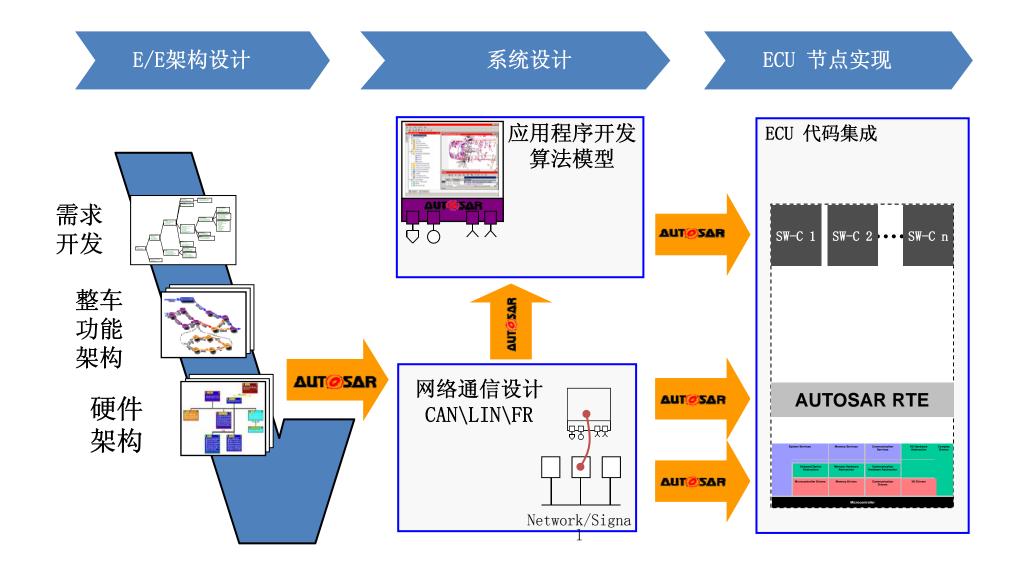


- □AUTOSAR基本概念
- □基础软件(BSW)介绍
- □开发流程
- □AUTOSAR开发工具



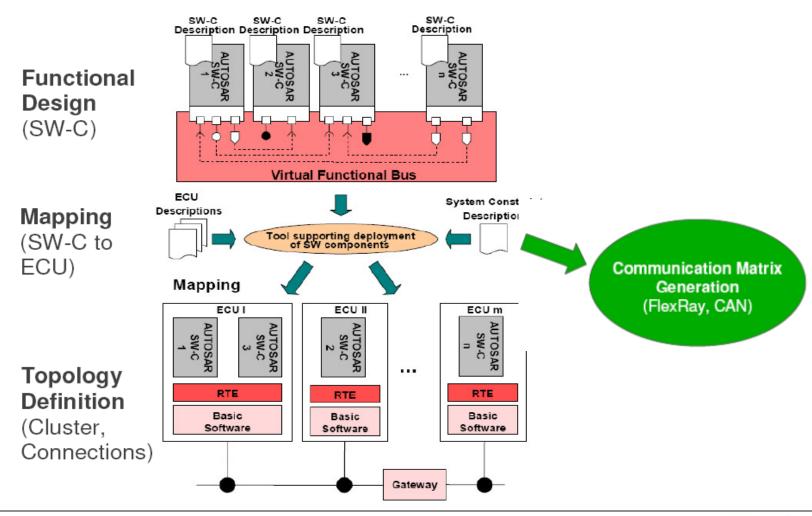


AUTOSAR无缝开发- 流程



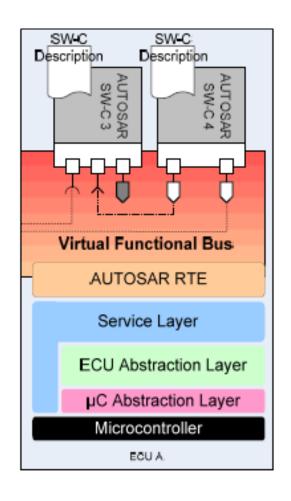


□ System Design (OEM)





□ ECU Integration (Supplier)



Application Development

RTE Configuration

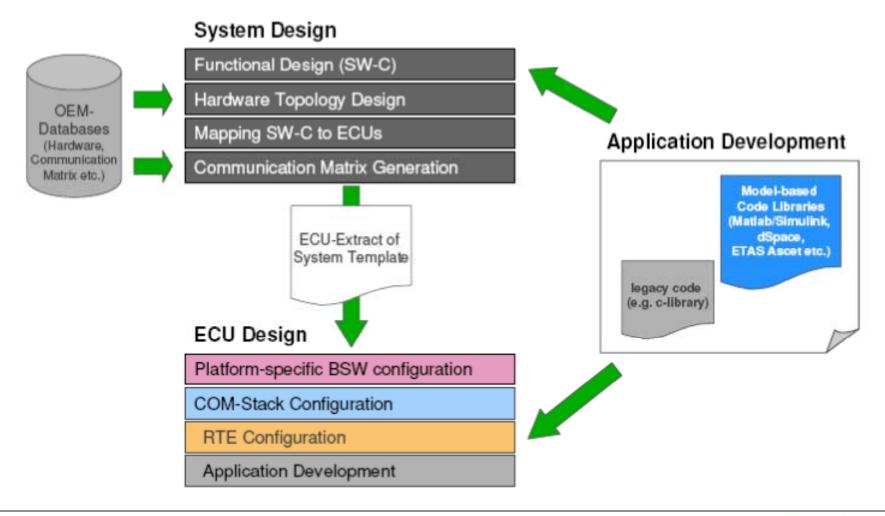
COM-Stack Configuration

Platform specific BSW Configuration



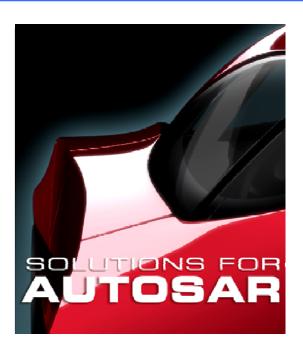


□自上而下的开发流程



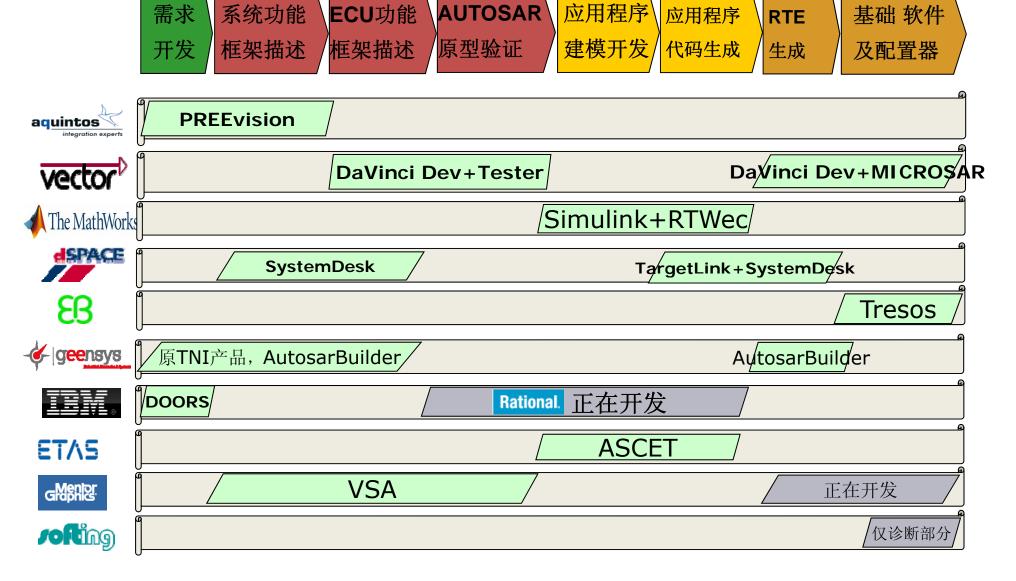


- □AUTOSAR基本概念
- □基础软件(BSW)介绍
- □开发流程
- □AUTOSAR开发工具





AUTOSAR无缝开发-实现工具





vector AUTOSAR开发流程及工具

Workflows and System Design

Design of a complete system (e.g. all ECUs on a CAN bus)

OEM

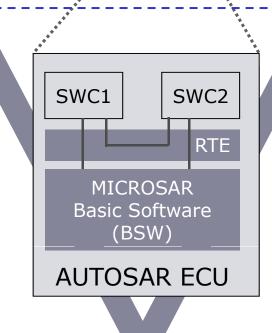
ECU Supplier

DaVinci Developer

AUTOSAR SWC (Software Component) design and RTE configuration

DaVinci Configurator Pro

AUTOSAR basic software configuration



DaVinci Component Tester

Test of SWC on the PC



谢谢

Q&A



更改历史

版本	更改描述	更改日期	更改人
1.0	初始版本,针对工程师培训	2009-06-05	吴临政
1.1	删减,以适合销售培训	2009-06-09	吴临政
1.2	丰富素材	2009-10-15	代仙

