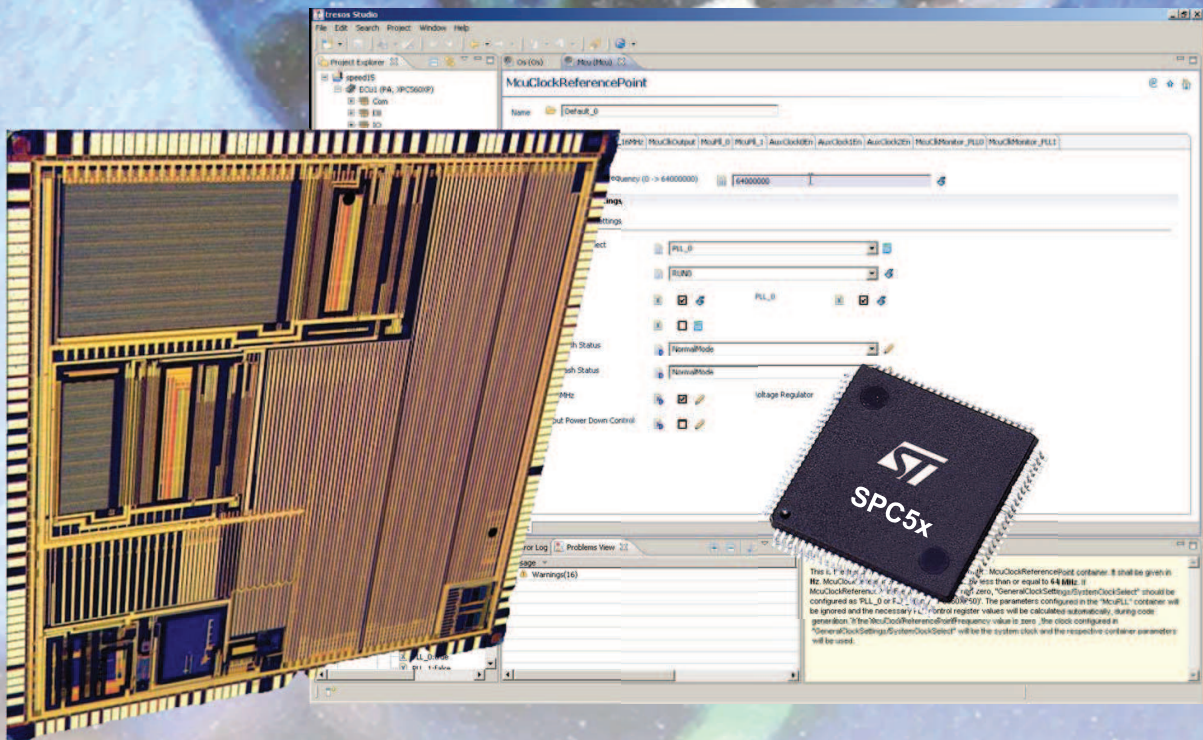**AUTOSAR**

Automotive Basic Software Components
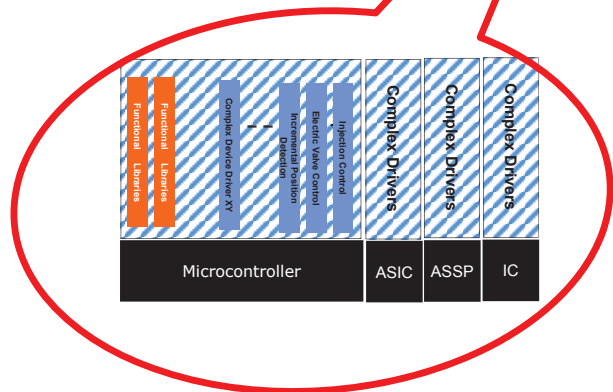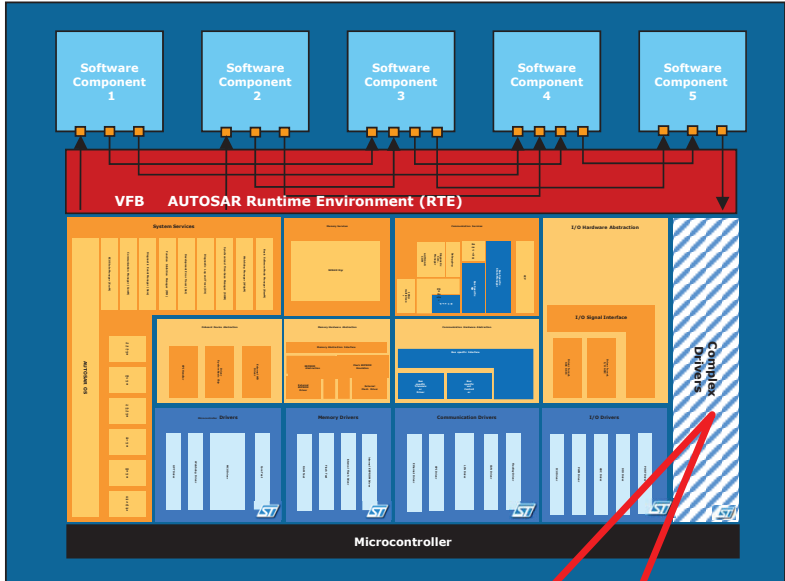# for SPC5x microcontroller

ST

2012

STMicroelectronics as AUTOSAR Premium Member is committed to support the development of standardized software infrastructure for automotive applications.

The ST Microelectronics automotive software development team is focused to provide optimized MCAL components to reach highest possible performance with lowest memory footprints. In cooperation projects with independent 3rd party software vendors ST guarantees the best fitting implementation into established development environments.

Special tailored license packages for development and production purposes are available to fulfill customer requirements for challenging technical and economical solutions

Dedicated software application engineers will support customer projects with trainings, hotline support and software oriented on-site activities.

In addition to the standard content AUTOSAR compliant 'ComplexDevice Driver will be available to support non-standard microcontroller peripherals as well as external STMicroelectronics automotive ASICs and ASSPs.

The STMicroelectronics SW offer is completed with libraries to support standard functionalities on SPC5xx microcontroller

SW Quality Approach
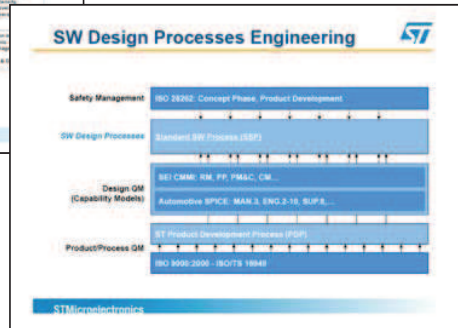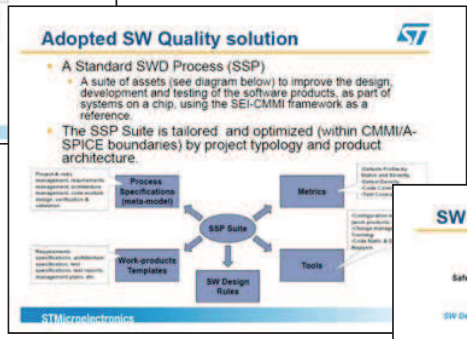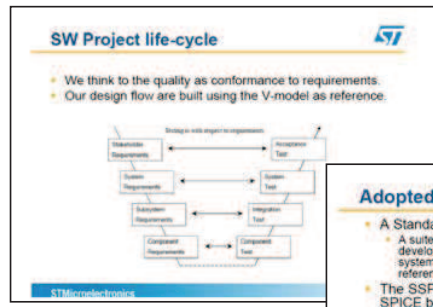
ST SW Development is fulfilling **CMMI flow** and is **Spice level3** certified by one of our major customers

AUTOSAR

SPC5x SW and tools packages

ST AUTOSAR Starter Kit 1

• all MCAL components for selected Microcontroller
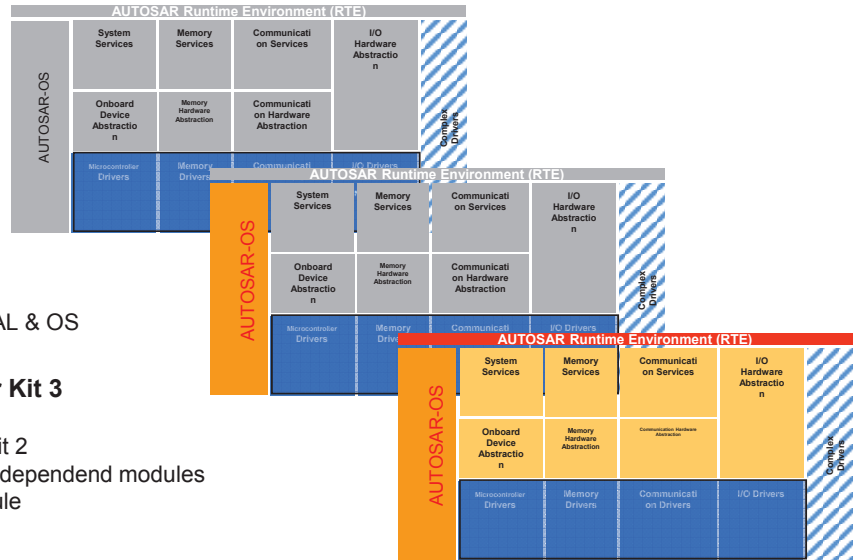• EB Tresos studio basic for MCAL

ST AUTOSAR Starter Kit 2

• AUTOSAR Starter Kit 1
• AUTOSAR OS SC1-4
• EB Tresos studio basic for MCAL & OS

ST AUTOSAR Starter Kit 3

• AUTOSAR Starter Kit 2
• all AUTOSAR HW independend modules
• RTE generator module
• EB Tresos studio

AUTOSAR Runtime Environment (RTE)

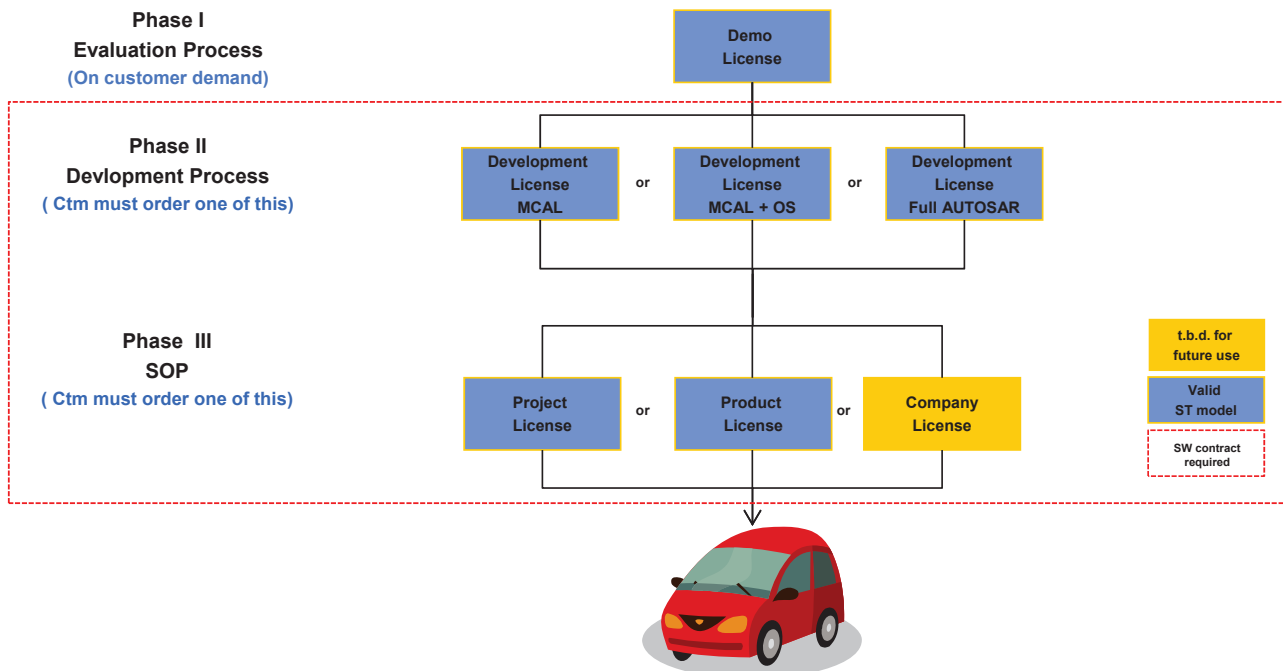| AUTOSAR-OS | System Services | Memory Services | Communication Services | I/O Hardware Abstraction | Complex Drivers |
| | Onboard Device Abstraction | Memory Hardware Abstraction | Communication Hardware Abstraction | | |
| | Microcontroller Drivers | Memory Drivers | Communication Drivers | I/O Drivers | |

Elektrobit tresos studio

will be delivered as unified configuration tool for all ST Microelectronic AUTOSAR SW packages

SPC56/57 AUTOSAR development and license overview

Phase I
Evaluation Process
(On customer demand)

Demo License

Phase II
Devlopment Process
(Ctm must order one of this)

Development License MCAL or Development License MCAL + OS or Development License Full AUTOSAR

Phase III
SOP
(Ctm must order one of this)

Project License or Product License or Company License

t.b.d. for future use

Valid ST model

SW contract required

License Glossary

Development Licenses

- Valid for usage of specified and delivered Software Components (MCAL, OS, service stacks), tools and services for development time and prototype samples

Production Licenses (no deliverables, right to use only)

- Project License
  - Valid for one ECU-project of Tier 1(eg. Climate Control for [car manufacturer] [platform xy])

- Product License
  - Valid for one Product of Tier 1 (eg. Climate control, seat ECU, ESP,…for several OEM or car platforms)
  - Or valid for one SPC5xxx in several applications

- Company License
  - Valid for a Tier 1 worldwide

Development Package	Produkt	Features
Starter Kit 1 SW_ASR_S-KIT_1	_MCAL_ - Tresos Configuration Tool for MCAL	Com: Can,Lin,Spi,Fr,(Eth) I/O: Port,Dio,Pwm,Icu,Adc Memory: Eep,Fls, MCDriver: Gpt,Mcu,Wdg
Starter Kit 2 SW_ASR_S-KIT_2	_MCAL / AUTOSAR OS_ - MCAL - Autosar OS - Tresos Configuration Tool for MCAL+OS	MCAL KIT_1 OS: AUTOSAR OS SC1-4*
Starter Kit 3 SW_ASR_S-KIT_3	_MCAL / AUTOSAR OS / Service Layer_ - MCAL - Autosar OS - HW independent BSW services - Tresos Studio	MCAL KIT_2 OS: KIT_2 Service: HW BSW modules
		•Scalability class 3&4 only for µC with MPU support

License type	MCAL 3.x MCAL 4.x	OS 3.x/OS 4.x (single core) OS 4.x (multi core)	BSW 3.x BSW 4.x
Demo License			
Development License			
Project License			
Product License			
Other license schemes on demand			