Developing innovative automotive electronics systems

AUTOSAR (AUTomotive Open System ARchitecture) is a worldwide development partnership of vehicle manufacturers, suppliers, and other companies from the electronics, semiconductor, and software industries. ST and ARCCORE, as AUTOSAR members, work together to develop a comprehensive software solution combined with ST’s SPC5 automotive microcontroller family to support customers for ECU development and industrialization.

System solution approach to AUTOSAR development

PARTNERSHIP BENEFITS

- ST and ARCCORE provide a full and professional solution for developing automotive applications based on the AUTOSAR framework
- We offer our customers the ability to:
  - Evaluate at no cost the development of a new AUTOSAR-compliant application.
  - Acquire the Development Professional license after the evaluation period
  - Access an unbeatable cost/performance solution for AUTOSAR
- ST provides the SPC5 32-bit Power Architecture MCU hardware and associated support
- ARCCORE provides the full AUTOSAR software solution including libraries, tools and support
The agreement brings together ST’s SPC5 family of 32-bit Power Architecture™ microcontrollers, specifically developed for use in automotive Electronic Control Units, and ARCCORE’s established AUTOSAR development software. ST customers will get access to ARCCORE’s comprehensive AUTOSAR development software for the SPC5 without any up-front costs, paying a license fee only after the evaluation period. Customers can explore, develop, optimize, and industrialize innovative automotive applications that are fully compatible with AUTOSAR’s specifications but do not require initial software payments. The license fee is payable only when the project ends its evaluation phase and it is substantially lower than existing solutions.

ST’s Power Architecture-based 32-bit MCUs are ideal for high-reliability control applications, including engine control, transmission, anti-lock braking systems, electrically operated power steering, active suspension, and ADAS (Advanced Driver Assistance Systems).

ARCCORE’s development tools for AUTOSAR include the Arctic Core embedded-software platform, which comprises a real-time operating system, memory services, and automotive communication services such as CAN and LIN, and the Artic Studio Integrated Development Environment.

Access to ST’s Automotive MCU know-how allows ARCCORE to provide SPC5 customers with the immediate advantage of a ready-made and market-proven methodology for easy and hurdle-free development of new AUTOSAR-compliant applications.

**OFFERED SOLUTION:**

**ARCTIC Studio** - Configure, generate and build your AUTOSAR stack based on Artop 4.5
- BSW/MCAL configuration and generation
- Configuration and RTE generation
- SWC authoring tool

**ARCTIC Core** - The AUTOSAR stack
- AUTOSAR standard version 4.0, 4.1 and 4.2 (components available already)
- Comprehensive set of communication stacks, network management protocols, diagnostic protocols and operating systems
- SOMEIP, SD
- ICC3, ASPICE 3, MISRA and ISO 26262

**Integration & service**
- Methodology and workflow
- Well-defined sync points between OEM/Tier1
- MCAL development
- Integrating components from various AUTOSAR vendors
- OEM-specific software components
- Integration on customer development

SPC5 SW development tools are available at
http://www.st.com/st-arccore

Artic Studio and Artic Core are ARCCORE products available at
http://www.arccore.com/resources/downloads

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