AUTOSAR : AUTOMOTIVE OPEN SYSTEM ARCHITECTURE

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The Automotive industry is facing nowadays several critical challenges. Variants handling (diversity of products) are increasing, vehicle features are adding complexity in the system architecture and new standards are coming on Safety and Environment. Finally the lead time to introduce a car on the market is regularly reduced with worldwide suppliers and customers. AUTOSAR, joint project of Automotive major industry players, is clearly oriented to solve these problems. The main objective is to establish an Open standard focused on interfaces between all SW modules, that will serve as a platform for future vehicle architectures and for all functional domains across the automotive industry. AUTOSAR key results are : „Ï Standardized application interfaces „Ï System top-down approach methodology specification „Ï Standardized SW components, hardware and system exchange formats „Ï Introduction of a Communication abstraction layer (Run Time Environment) „Ï Implementation and Standardization of a "Core solution" These results have been already achieved in the first phase of AUTOSAR. The second phase started begin 2007 and preparing the industrialization of AUTOSAR, is emphasizing on Safety issues and the correction of weak points detected in the first phase. Thanks to this standardization, the reuse of SW Components is simplified, the design phases are more efficient (platform approach) and the Integration phase using interoperable tools is easier and faster. The integration of new complex innovative functions in the car with AUTOSAR will be then fully mastered.