Development of AUTOSAR Software Components of MDPS System

Authors : Jae-Woo Kim, Kyung-Joong Lee, Hyun-Sik Ahn

Abstract : This paper describes the development of a Motor-Driven Power Steering (MDPS) system using Automotive Open System Architecture (AUTOSAR) methodology. The MDPS system is a new power steering technology for vehicles and it can enhance driver's convenience and fuel efficiency. AUTOSAR defines common standards for the implementation of embedded automotive software. Some aspects of safety and timing requirements are analyzed. Through the AUTOSAR methodology, the embedded software becomes more flexible, reusable and maintainable than ever. Hence, we first design software components (SW-C) for MDPS control based on AUTOSAR and implement SW-Cs for MDPS control using authoring tool following AUTOSAR standards.