



Diplomanden- und Doktorandenseminar
des Instituts für Informatik

CarRing II: A Real-Time Computer Network as Successor of Flexray?

Marcel Wille, TU Clausthal

Today, mechatronic systems in cars and their communication requirements are increasing while the interconnection technology remains at several application-specific field buses with different software. A single standard does not exist. Consequences are limited scalability or flexibility as well as serious quality, performance and safety problems. FlexRay was a first step towards reliable, real-time communication in cars. But, to meet all demands on future applications like steer-by-wire as well as the increasing communication requirements, a capable successor of FlexRay called CarRing II is proposed. In comparison to field buses, CarRing II introduces a new communication paradigm for intra-car-communication that is based on a highly reliable, ring-based, real-time computer network. CarRing II is used to connect all components of mechatronic systems in cars and it tries to solve the problems of field buses. Eventually, CarRing II should unify and replace the multitude of individual field buses required today. Benefits and basic concepts of CarRing II as well as a simulation-based comparison with FlexRay are presented to show the advantages of CarRing II.

Donnerstag den 22. Februar 2007
14.40 Uhr in Raum 106