

## **Product Focus**

## Real-Time BroadR-Reach—Ethernet on the Speedway

For the majority of automotive developers it is perfectly clear that Ethernet will be the next evolutionary step in vehicle networking. However, for the development of many of upcoming data-intensive Ethernet applications, real-time capabilities are the missing link when it comes to accurately testing such systems.

With BroadR-Reach (100Base-T1), one of the most promising automotive Ethernet standards is supported by Kithara RealTime Suite. PC-based real-time properties for this standard enable automotive engineers to directly control and test physical Ethernet networks in vehicles. This way, by utilizing guaranteed reaction times with the Kithara real-time system, data can be precisely captured and embedded into sophisticated testing processes via this Ethernet transport layer, for example on test stands.

The advantages of Ethernet in automotive networking are primarily the particularly increased

transmission speeds compared to previous automotive bus systems, high scalability as well as cost efficiency due to lighter wiring and easier programming. BroadR-Reach can also act as a central backbone network, enabling fast data exchange between multiple vehicle systems.

The support of BroadR-Reach is based on the widely used Kithara network drivers. For this matter, Kithara can draw on its decades-long expertise surrounding real-time Ethernet. Many other real-time functions of Kithara RealTime Suite are also applied for developing cutting-edge automotive technologies. For instance, they can be found in the field of hardware-in-the-loop such as for the capturing and reproducing of simulation data.

The latest information about Kithara products as well as a free 90-day trial version can be found on our website.

