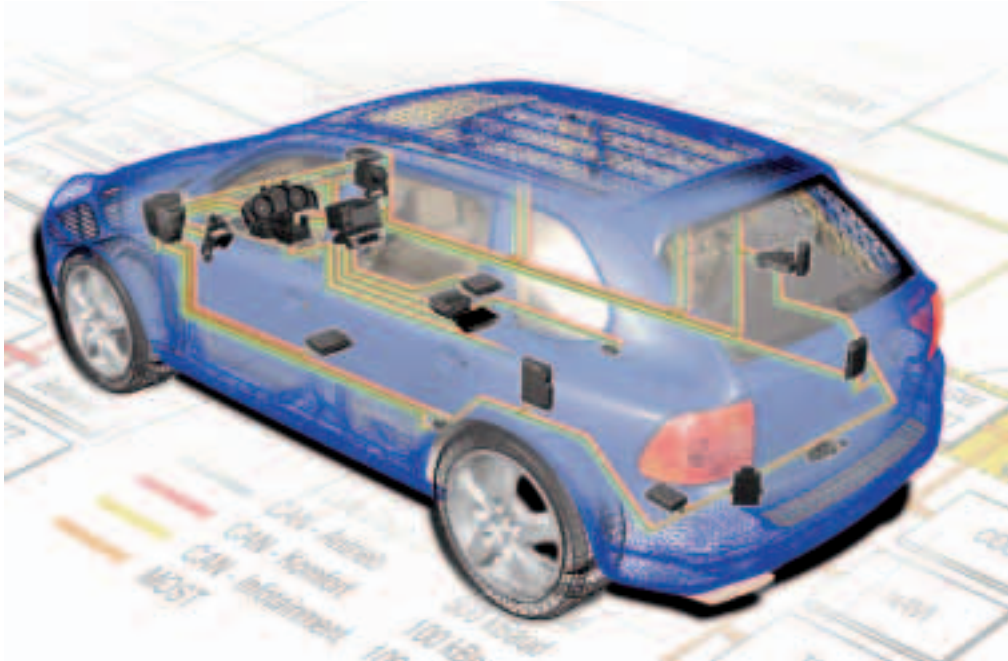


Networked Systems in the Cayenne

Communication and Data Transmission



A fully networked system takes care of all electronic data exchange in the Cayenne.

With its move into the Sport Utility Vehicle segment, Porsche simultaneously struck out on a new path in terms of communication and data transmission between electronic control units in a vehicle. This path is embodied in the new optical-based technology (MOST: Media Oriented Systems Transport) which was used in the Cayenne in addition to the more familiar network architectures. Its MOST-based infotainment system makes Porsche one of the first constructors to offer a scalable and modular concept in this area.

The tide of digitalization has brought with it a wealth of data from various sources that must be transmitted and exchanged within a vehicle. Chassis and security systems (automatic transmission, brake system, etc.), comfort electronics (air-conditioning system, ParkAssist, etc.) and infotainment (navigation, radio, telephone, etc.)

are reliant on electronic information, indeed they are controlled by this data. Traditional electronic concepts would not be able to cope with the high requirements that the Cayenne demands in this area, so Porsche installed a fully networked system, in which some 40 control units take care of a comprehensive range of tasks.

To ensure that the control units can communicate perfectly with one another, suitable transmission technology and a practical system architecture was required. To this end, Porsche decided to break down the complex vehicle electrical system into more manageable subsystems, in which each electrical control unit was classified accord-

